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The Shared Services Organizational Model in Higher Education Enrollment Management: the Application of the Transactional Components of the Burke-Litwin Model of Organizational Performance and Change and the Moderating Effect of Employee Engagement on Individual Motivation

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THE SHARED SERVICES ORGANIZATIONAL MODEL IN HIGHER EDUCATION
ENROLLMENT MANAGEMENT: THE APPLICATION OF THE
TRANSACTIONAL COMPONENTS OF THE BURKE-LITWIN MODEL OF
ORGANIZATIONAL PERFORMANCE AND CHANGE AND THE MODERATING
EFFECT OF EMPLOYEE ENGAGEMENT ON INDIVIDUAL MOTIVATION

by

ROSEMARY COOPER

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
Department of Human Resource Development and Technology

Jerry Gilley, Ed.D., Committee Chair

College of Business and Technology

The University of Texas at Tyler
December 2015

The University of Texas at Tyler
Tyler, Texas


This is to certify that the Doctoral Dissertation of

ROSEMARY COOPER

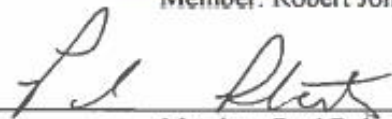
Has been approved for dissertation requirements on
November 16, 2015
for the Doctor of Philosophy degree

Approvals:


Dissertation Chair: Jerry Gilley, Ed.D.


Member: Ann Gilley, Ph.D.


Member: Robert Jones, Ph.D.


Member: Paul Roberts, Ph.D.


Chair, Department of Human Resource Development and Technology


Dean, College of Business and Technology

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Table of Contents

List of Tables	iv
List of Figures	v
Abstract	vi
Chapter One - Introduction	1
Background to the Problem	1
Statement of the Problem	7
Purpose of the Study	9
Theoretical/Conceptual Underpinnings of the Study	10
Research Questions	13
Overview of the Design of the Study	13
Sample	13
Approaches to Data Collection.....	14
Approaches to Data Analysis	14
Issues Associated with Reliability and Validity	14
Assumptions and Limitations	14
Significance of the Study	16
Definition of Terms	19
Organization of the Dissertation.....	19
Chapter Two – Literature Review.....	21
Introduction	21
Current State of Higher Education	22
Origins of Enrollment Management.....	25
Impetus for Organizational Change Strategies in Higher Education	30
External Drivers of Change	30
Internal Drivers of Change	34
Shared Services Model.....	35
Theoretical Framework	43

Organizational Change	43
Resource Dependency Theory	44
Institutional Theory	46
Conceptual Framework	49
The Burke-Litwin Model of Organizational Performance and Change	49
Management Practices	56
Structure	59
Task Requirements and Individual Skills/Abilities (Job-Person Match).....	62
Motivation.....	63
Employee Engagement.....	64
Summary of the Chapter.....	71
Chapter Three - Methodology.....	73
Design of the Study	75
Population/Sample	76
Instrumentation.....	77
Data Collection Approaches/Procedures.....	80
Data Analytic Techniques	81
Reliability and Validity	83
Reliability	83
Validity	85
Limitations	88
Summary of the Chapter	88
Chapter Four – Data Analysis Results	90
Descriptive Statistics	90
Reliability	95
Confirmatory Factor Analysis.....	96
Structural Equation Model Study Group 1	101
Hypothesis Testing Study Group 1	101
Moderation Testing Study Group 2.....	103

Post-hoc Analysis	107
Summary of the Chapter	109
Chapter Five – Discussion, Conclusion, Limitations, and Future Research.....	111
Introduction	111
Summary of the Study.....	111
Findings	113
Conclusions	118
Implications	121
Burke-Litwin Model of Organizational Performance and Change	121
Burke-Litwin Organizational Assessment Survey	122
Rich Job Engagement Scale	122
Practical Implications for Higher Education Administrators	123
Limitations	124
Future Research.....	125
Summary of the Chapter	128
References	129
Appendices.....	155
Appendix A: Request to Use the Burke-Liwin Organizational Assessment Survey ...	155
Appendix B: Organizational Assessment Survey	157
Appendix C: Institutional Review Board Study Approval.....	176

List of Tables

Table 1	Internal Consistency of the Burke-Litwin OAS Construct.....	84
Table 2	Burke-Litwin OAS Measurement Validity.....	86
Table 3	Job Engagement Items and Factor Loadings	87
Table 4	Respondent Demographics	94
Table 5	Internal Consistency of the Burke-Litwin Organizational Assessment Survey and the Rich Engagement Scale	96
Table 6	Scale Items With Composite Reliability and Factor Loadings.....	99
Table 7	Goodness-of-fit Indices.....	100
Table 8	Standardized Estimates	107
Table 9	Test for Moderation by Employee Engagement	109

List of Figures

Figure 1	Burke-Litwin Model of Organizational Performance and Change	12
Figure 2	Burke-Litwin Model of Organizational Performance and Change	53
Figure 3	Burke-Litwin Model of Organizational Performance and Change: The TRANSFORMATIONAL Factors.....	55
Figure 4	Burke-Litwin Model of Organizational Performance and Change: The TRANSACTIONAL Factors	55
Figure 5	Hypothesized Model.....	75
Figure 6	Hypothesized Model – Study Group 1	103
Figure 7	Hypothesized model – Study Group 2.....	106

Abstract

THE SHARED SERVICES ORGANIZATIONAL MODEL IN HIGHER EDUCATION ENROLLMENT MANAGEMENT: THE APPLICATION OF THE TRANSACTIONAL COMPONENTS OF THE BURKE-LITWIN MODEL OF ORGANIZATIONAL PERFORMANCE AND CHANGE AND THE MODERATING EFFECT OF EMPLOYEE ENGAGEMENT ON INDIVIDUAL MOTIVATION

Rosemary Cooper

Dissertation Chair: Jerry Gilley, Ed.D.

The University of Texas at Tyler
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As a result of increased economic, social, and educational constraints, institutions of higher education are evaluating new approaches to operating in more restrictive environments. To mitigate these external constraints, institutional administrators are implementing organizational change structures that create efficiency, drive down costs and make the best use of human capital and technological resources.

Within the last decade there has been strong encouragement from higher education pundits and consultants to implement the shared services organizational structure in higher education enrollment management divisions. Higher education institutions are borrowing the shared services organizational model from other industries

and utilizing organizational change protocol from a wide variety of work groups. While much can be said for borrowing proven ideas and concepts from other industry, a lack of results-based research and empirical evidence exists to support the impact of this relatively new organizational phenomenon in higher education on the employees within these environments. In addition, the shared services organizational model has not been examined or vetted in the higher education context utilizing valid and reliable causal organizational change models and measurement instruments.

This study examined shared services models that have been implemented in the context of enrollment management divisions in higher education institutions. A total of 121 higher education institutions participated in this study. Each of the institutions operated a shared services unit within their enrollment management divisions. The Burke-Litwin Model of Organizational Performance and change was utilized as the conceptual framework upon which to build the study. Relationships among specific transactional constructs of the Burke-Litwin Model (e.g., management practices, structure, task requirements and individual skills/abilities, and motivation) were examined to better understand perceptions of employees within the shared services units. Further, employee engagement was examined as a moderator of relationships among these constructs within the causal model.

Chapter One

Introduction

Background to the Problem

Compared to any other time in U.S. history, higher education is facing challenges today that are unparalleled to any other changes of the past (Kezar & Eckel, 2002). In the last decade, higher education has experienced extensive change that has come about from a variety of driving forces: financial pressures; increased public scrutiny; growth in technology; changing demographics; competing values; changing faculty roles, and the rapid rate of change in the world around us (Kezar & Eckel, 2002). As operating and tuition costs have increased, state and federal funding and private endowments have decreased (Metnick, Condell, & Howard, 2012). Consequently, colleges and universities are faced with the challenge of doing more with less (Metnick et al., 2012). The U.S. Government Accountability Office (GAO) (Government Accountability Office) released its Post-Secondary Education report in January of 2012, citing that “over the last decade, the number of students seeking postsecondary education has increased” and so has the cost of paying for college” (p. 1). The GAO also disclosed that from 1999 to 2009, “published tuition and fees increased between 33 and 56 percent at public and private nonprofit schools while median family income remained stagnant over the same period” (GAO, 2012, p. 1).

According to Cheslock and Gianneschi (2008), competitiveness between institutions of higher education has been amplified due to a steady decline in state appropriations, leading public institutions to find funding from other sources such as tuition. Gumport (2001) emphasizes that colleges and universities are now borrowing

imperatives and values from corporate America, thus institutions of higher learning are now seen as simply a sector of the economy. Gumpert (2001) also supports the idea that institutional leadership is guided by the principles of knowing its liabilities and assets, to anticipating costs and benefits, enhancing efficiency and effectiveness, and most importantly, increasing customer satisfaction. In essence, higher education is now a business that requires the management acumen and practices of corporate America. To further intensify competition, publications such as *U.S. News and World Report* are publishing rankings that outline institutional hierarchy while university presidents are utilizing a corporate industry yardstick in order to measure and compare the magnitude of the enterprise with Fortune 500 companies (Gumpert, 2001; Schulz & Lucido, 2011).

Higher education affordability is on the minds of everyone from parents and students to policy makers and institutional administrators. With tuition increases and student and university debts at all-time highs, McDonald (2013) asserts that rising tuition costs have increased faster than the rate of inflation over the past four decades. These types of staggering statistics, have led the independent audit, tax and advisory firm, Grant Thornton, to assert that the “higher education sector is at a crossroads and in the crosshairs of regulators and critics” (Kurre, 2013, p. 1). According to Sanburn (2012), the 2012 survey by TIME and the Carnegie Corporation of New York reported that 96 percent of senior administrators at colleges and universities believe higher education is in a crisis state. Moody’s Investors Service released a report in 2012 that indicated that the “higher education outlook was mixed, with positive outlooks for a minority of “diversified market-leading” public and private colleges and universities, and negative outlooks for the majority — those dependent on tuition or state money” (Carlson, 2012,

p.1). In January of 2013, Moody's altered its annual report by cutting its 2013 outlook for U.S. higher education to negative due to escalating pressures on revenue sources (McDonald, 2013).

With reports from the likes of Moody's, surveys from *TIME* and the Carnegie Corporation, and reports from the Government Accountability Office (2012), higher education administrators are very much aware of the tumultuous state in which they find themselves. It appears that higher education institutions may see their financial situations get worse before they get better. With that said, institutions are looking for methods to sustain their value, save money, remain competitive, and in some ways, lead during a time when it is hard enough to just remain afloat. Selingo (2012) suggests that university leaders desperately need to transform how their institutions are doing business.

Selingo (2012) contends that the years from 1999 to 2009 are considered higher education's "lost decade" (p.1). He explains that during those years there was a surge "in students pursuing higher education, driven partly by the colleges, which advertised heavily and created enticing new academic programs, services and fancy facilities" (Selingo, 2012, p.1). With a growing demand for a college degree, institutions were able to raise their tuition costs and families were willing to go to any length to pay for the education (Selingo, 2012). Those lengths included students and families taking on insurmountable debt.

According to Selingo (2012), in 2003 there were only two colleges that "charged more than \$40,000 a year for tuition, fees, and room and board; by 2009, 224 were above that mark" (p.1). As of 2012, the total outstanding student loan debt was more than \$1 trillion (Selingo, 2012). Coupled with student loan debt, is the debt of institutions.

During the “lost decade”, institutional debt rose 88 percent to a current \$307 billion (Selingo, 2012). Selingo (2012) suggests that from 1999 to 2009, colleges and universities had the opportunity to prepare for uncertain times that included students with increased financial need, a decrease in high school graduates and technological advances in teaching. However, he suggests that institutions continued with an unsustainable model, believing that change would not occur (Selingo, 2012).

Issues like affordability, increasing student debt, and decreasing state and federal funding are looming overhead, causing regulators, critics, and stakeholders alike, to ask questions regarding the sustainability of the current higher education business model (Kurre, 2013). According to Berquist (1998), institutions are beginning to rethink their reasons for existence and as a result, are changing their identities. Institutions are accomplishing this task by moving from more singular models of operation, such as bureaucratic systems, to considering multiple ways of becoming more efficient and retain their competitive advantage (Kezar, 2001). Metnick et al. (2012) propose that higher education administrators are taking a page from business playbooks and are moving toward organizational change structures that will facilitate greater operational efficiencies and maximize service delivery quality, without sacrificing their institutional missions. Lerner, Unterman, and Oster (2013) indicate that “budget cuts have resulted in the downsizing of administrative workforces within higher education, placing pressure on remaining staff and decreasing service levels” (p.23). With pronouncements of crisis in higher education coming from both within and outside of the higher education industry, college administrators are rethinking their institutions’ administrative service models with a goal toward achieving high performance (Birnbaum, 2000; Metnick et al., 2012).

To understand the need for changing the current administrative service models utilized in colleges and universities, we must first understand the importance of such models. For the sake of this study, administrative service models are described as decentralized units that exist to provide and manage routine customer services, business processes, transaction processing, and back office functions such as data entry, file maintenance, and document imaging (Management Consulting Partners, n.d; Metnick et al., 2012). Administrative service models are important, as quality service, service climate, and customer satisfaction are linked to individual loyalty and retention (Rust & Zahorik, 1993). Schneider, White, and Paul (1996) also support this notion by offering that “the interest in customer perceptions of service quality rests on the premise that a customer who holds positive perceptions of an organization's service quality is likely to remain a customer of that organization” (p. 150). Higher education consulting firm, Noel-Levitz (2014) announced in their *2014 National Student Satisfaction and Priorities Report* that student satisfaction or dissatisfaction with campus services can impact new enrollment and persistence rates. The issue of customer retention is paramount in the context of higher education; never before has retaining the student been so important. At a time when state and federal appropriations have been cut, universities rely on the tuition dollars of students to help sustain their current operations.

The need to change from decentralized administrative services models to more streamlined and efficient models stems from a variety of internal and external organizational factors. Gulati (2007) explains the need to change service models is actually a solution to institutional problems caused by internal and external factors. Ridding higher education student services divisions of administrative bloat is top priority.

According to Greene, Kisida, and Mill's Goldwater Institute Policy Report (2010), "universities are suffering from "administrative bloat," expanding the resources devoted to administration significantly faster than spending on instruction, research and service" (p. 1). Remaining competitive by offering innovative service options and technological alternatives to service delivery are other approaches to creating value during tough economic times (Oftelie, 2009).

Lerner et al. (2013) also posit that as a result of the current economic demands, budgetary constraints, and shifting demographics, higher education institutions are changing their current fragmented organizational structures to that of a shared services business unit concept in areas such as student services, IT, and HR, in order to sustain their competitive advantage, and in some cases, just sustain. The shared services concept is "gathering momentum as colleges and universities nationwide are exploring systematic structural approaches for containing costs that have begun to prove valuable in public services" (Metnick et al., 2012, p. 2). According to Schulz and Lucido (2011), many colleges and universities are shifting to centralized enrollment divisions in the place of decentralized enrollment systems that consist of fragmented silos. The American Association of Collegiate Registrars and Admissions Officers has identified the fact that process knowledge often resides in service silos such as Financial Aid, Admissions and Registrar Offices (Kilgore, n.d.). Evidence from Noel Levitz's 2004 National Enrollment Management Survey (NEMS) also suggests that colleges and universities that are poised to succeed are shifting to centralized shared services models in their enrollment management divisions (Schulz & Lucido, 2011).

Statement of the Problem

Based on the emergence of economic, social, and educational constraints, institutions of higher education have taken on new approaches to accomplish their mission of doing more with less, remaining competitive, and generating revenue while continuing to provide quality education and opportunities for growth and research. Institutional leaders at colleges and universities are implementing organizational change structures, such as the shared services unit, in order to mitigate such external forces as economic strains, societal concerns, and regulatory factors in order to maintain the competitive advantage and provide customer centric services to their stakeholders (Metnick et al., 2012).

According to Kezar and Eckel (2002), the changes many institutions are imploring are far greater than quick fixes or trial tests. Many institutions are attempting comprehensive transformational change efforts without the benefit of tried and true change strategies to guide their approaches (Kezar & Eckel, 2002). Much of the change literature in higher education discusses generalized change strategies that are effective, including presidents that are prepared for change, strong leadership, cooperative and joint processes, and providing rewards for successful change (Roberts, Wergin, & Adam, 1993; Taylor & Koch, 1996). Kezar and Eckel (2002) warn that academic research with this broad of a message may misguide institutions and create a “one size fits all” approach. Kezar and Eckel (2002) also ask the question of whether broad strategies like this can be applied at every institution. Christensen and Raynor (2003) suggest that some leaders and managers “impatiently observe a few successful companies, identify some practices or characteristics that these companies seem to have in common, and then

conclude that they have seen enough to write an article or book about how all companies can succeed” (p.68). Kezar (2001) explains that few scholars have made a point to examine change on college and university campuses and to demonstrate how distinct the change is from other organizations. Instead, institutions are using models of change from other industries and disciplines and from within other organizational types, without considering whether they are a true fit within higher education (Kezar, 2001).

The shared services organizational structure is commonly implemented in the public and private sector in areas such as human resources and information technology (Cooke, 2006; Janssen & Joha, 2006). Higher education has also implemented shared services units in these same areas within the last decade (Administrative Services Transformation, 2013; Cornell University, 2013; The University of Texas, 2013; Yale University, 2013). However, it is the recent surge of interest to implement the shared services organizational structure in higher education enrollment management divisions that has led to this research (Glenn, 2009). It is clear that the higher education industry is borrowing organizational change protocols from other industries and from across various types of work groups. This imitative approach to addressing organizational change factors may prove to be unsuccessful without substantial theoretical foundations and empirical evidence to support it.

In the higher education industry, an overabundance of editorial-based reports and white papers exist to proclaim the requisite use of the shared services unit as an essential element of enrollment management effectiveness and efficiency models (Stony Brook University Senate Administrative Review Committee, 2012; Glenn, 2009; Deloitte, 2011; Johal, 2013; Metnick et al., 2012). While the driving forces behind movement to shared

services units in higher education is often discussed, very little attention has been paid to the critical role specific constructs such as management practices, organizational structure, employee task requirements and individual skills and abilities, and individual motivation play in the change process. There is a lack of results-based research and empirical evidence that demonstrate the impact of this relatively new organizational phenomenon on individual motivation. Further, the shared services organizational structure, in the context of higher education enrollment management, has not been examined utilizing valid and reliable causal organizational change models and measurement instruments.

Purpose of the Study

The purpose of the study was to examine shared services models that have been implemented in the context of enrollment management divisions in higher education institutions. This study will examine specific transactional constructs of the Burke-Litwin Model of Organizational Performance and Change (OPC) (e.g., management practices, structure, task requirements and individual skills/abilities, and motivation) as well as the moderating role employee engagement plays in impacting relationships among these constructs within the causal model.

Results obtained from the research will be utilized to assist other higher education institutions that desire to implement a shared services unit in the context of enrollment management. Results from the study will also allow other institutions to determine which factors are most important to consider when initiating transformational and/or transactional change processes in this particular context. This study is also being done in response to remarks by scholars such as Kezar (2001) who suggest that more research

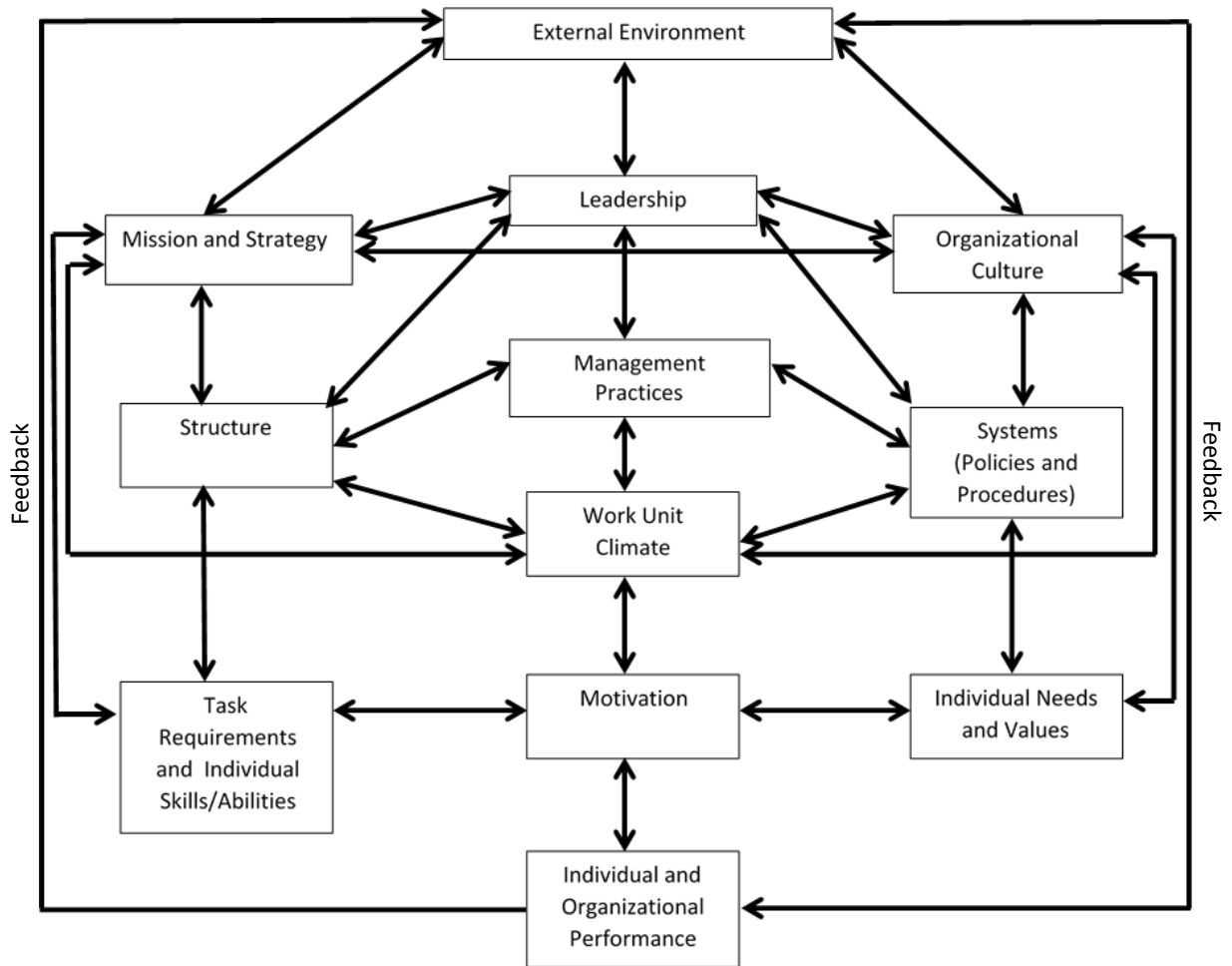
needs to be done on how “teleological models can be successful within subunits of the institution, driven by administrative values and supported by more centralized structures” (p. 128). Kezar (2001) also suggests that there is a need to research and examine imitation and emulation as reasons for change in higher education institutions.

Theoretical/Conceptual Underpinnings of the Study

This study will use the following theoretical and conceptual underpinnings in order to provide a foundation for the research; organizational change, resource dependency theory, institutional theory, employee engagement, and the Burke-Litwin Model of Organizational Performance and Change.

Organizational change theory will be discussed and described as modifications within an organization, including changes among individuals, over time, in one or more dimensions of the entity, via a three-step process of unfreezing, moving, and refreezing (Burnes, 1996; Lewin, 1947; Schein, 1987; Van de Ven and Poole, 1995). Resource dependency theory serves as a framework for understanding why the external environment is an active force in organizations seeking to change their structure. Resource Dependency Theory portrays the corporation as an open system, dependent on opportunities and resources in the external environment (Hillman, Withers & Collins, 2009). Without access to these external resources, organizations begin to look inward for ways to meet their needs and sustain in the marketplace, thus the action results in organizational change (Hillman et al., 2009). Institutional theory serves to provide another lens from which to view the reasons for organizational change. Institutional theory suggests that organizational environments are characterized by rules and requirements that organizations must follow in order to receive support and be considered

legitimate (Kondra & Hinings, 1998). The pressure to conform to standards of legitimacy often leads organizations to model their own structures after other recognized and reputable organizations (DiMaggio & Powell, 1983; Schulz & Lucido, 2011). Employee engagement will be examined based on the seminal work of Kahn (1990) and Rich, Lepine and Crawford (2010). Employee engagement will be discussed as the “the harnessing of organization members’ full, preferred, selves to their task behaviors and work roles (Kahn, 1990; Rich et al., 2010). The Burke-Litwin Model of OPC will be used to demonstrate the open systems approach to organizational change and the causal nature of transformational and transactional organizational dynamics. The model includes an input-throughput-output format with a feedback loop (Figure 1) (Burke & Litwin, 1992). The model further demonstrates transformational and transactional dynamics in organizational change by including 12 distinct constructs.



(Burke & Litwin, 1992)

Figure 1. Burke-Litwin Model of Organizational Performance and Change

This study will review the relevant roles management practices (Boyatzis, 1982; Kotter, 1982; Luthans, 1988; Mitzberg, 1973), structure (Galbraith, 1974; Duncan, 1979), task requirements and individual skills/abilities (Edwards, 1991; Edwards, 1996; Kristof, 1996; Kristof-Brown, Zimmerman, and Johnson, 2005) and motivation (Evans, 1986; Locke, Shaw, Saari, & Latham, 1981; Vroom, 1964; Weiner, 1972; Weiner, 1985) play in the organizational change process.

Research Questions

A significant gap exists in the literature regarding the use of the shared services concept in higher education enrollment management divisions. There is also a substantial lack of empirical and practical evidence to support this type of organizational change structure. There is a growing need to examine this structure in the specific context of higher education while utilizing valid and reliable causal organizational change models and measurement instruments. Based on these observations, two research questions were formulated.

1. Is there a direct relationship between the following transactional constructs of the Burke-Litwin Model of Organizational Performance and Change: structure and motivation; structure and management practices; structure and task requirements and individual skills/abilities; management practices and task requirements and individual skills/abilities; management practices and motivation; task requirements and individual skills/abilities and motivation?
2. Does employee engagement moderate the relationships between structure, management practices, task requirements and individual skills/abilities, and motivation?

Overview of the Design of the Study

In order to answer the research questions, a cross-sectional, survey-based research design was applied (Bryman & Bell, 2011).

Sample. The selected sample of participants was chosen through nonprobability convenience sampling from 121, four-year universities (Bryman & Bell, 2011). This technique was used as the researcher had working professional relationships with

colleagues at other institutions that operated a shared services concept in their enrollment management divisions. The research sample consisted of employees (entry level and managers) that worked in shared services units in enrollment management divisions in these institutions.

Approaches to data collection. The data was collected utilizing two valid and reliable survey instruments; the Burke-Litwin Organizational Assessment Survey and the Rich Job Engagement Survey. The survey instruments were slightly modified, combined, and renamed the Organizational Assessment Survey (OAS). The Burke-Litwin Organizational Assessment Survey aligns directly with the Burke-Litwin Model of Organizational Performance and Change. The OAS was delivered using Qualtrics (2013) online data collection software. The survey was sent to administrators of the shared services units and distributed to the employees of those units.

Approaches to data analysis. The results of the study were analyzed using confirmatory factor analysis and structural equation modeling in order to confirm the structural associations, causal influences, and relationships among the constructs of the Burke-Litwin Model of OPC, as well as the moderating effect of employee engagement on those relationships.

Issues associated with reliability and validity. Issues associated with reliability and validity were addressed utilizing previous academic research that has applied the Burke-Litwin Model of OPC, the Burke-Litwin OAS, and the Rich Job Engagement Scale.

Assumptions/Limitations. The following assumptions were acknowledged for this study:

1. The shared services units being studied exist within enrollment management divisions within the institutions.
2. Sample data collected for this study comes from 4-year, public, higher education institutions.
3. The sample will be taken from institutions that vary considerably in student population, therefore, the shared services unit may vary in size and the type of services provided.

The following limitations are acknowledged for this study:

1. Response rate may be affected by the length of the organizational assessment survey. The survey included 51 questions taken from the Burke-Litwin Organizational Assessment Survey (W. Warner Burke Associates, Inc., n.d.), 18 questions taken from the Rich Engagement Scale (Rich et al., 2010), and ten demographic questions.
2. A cross sectional, survey-based, quantitative research design was utilized for this research. The use of this design, and not a qualitative design, limited the ability to ask open ended questions and determine why individuals feel the way they do.
3. Nonprobability sampling was utilized for this study. In this case, the external validity was negatively impacted, therefore, results are not generalizable.
4. The research will take place in 4-year, public, higher education institutions. In that case, the results may not be useful to other schools or institutions such as 2-year upper level universities, private colleges, community colleges, or technical/vocational schools.

5. Self-report bias (common rater effect) may contribute to common method variance. The respondent to the online survey was the same individual that provided the measure for both the predictor and criterion variable (Podsakoff et al., 2003).

Significance of the Study

Successful organizational change is often centered around “an organization’s ability to understand dimensions influencing change interventions” as presented in the Burke-Litwin Model (Stone, 2010, p.3). To better understand whether the shared services concept influences individual motivation and performance, it is important to study the relationship between organizational performance and change dimensions (Stone, 2010). Scant literature exists in the field of human resource development on the topic of shared services, with only a few studies discussing the shared services concept in the context of higher education. As of the creation of this study, no academic literature exists that discusses the use of the shared services concept in enrollment management units in higher education and the effect of employee engagement on the relationships between organizational change dimensions.

This research will contribute to the field of human resource development by providing a genesis for the academic community to begin discussing this phenomenon in higher education as it relates to change management, human capital management, training and development, knowledge transfer, leadership and the role of employee engagement within the shared services organizational structure (Cooke, 2006; Ramphal, 2013; Wang & Wang, 2007). Due to the complex structure of a shared services unit, Burns et al. (2008) suggest that special attention must be paid to the implementation

process, which includes “a structured approach designed to transition an organization from its current state to the desired future state” (p. 8). According to Shah (1998), the shared services organizational structure “requires a transformation of people” (p.7).

In most organizations, employees of one unit have typical departmental relationships with another unit (Shah, 1998). In the case of a shared services unit, employees and managers must develop business partnerships with other departments, thus requiring a different set of rules and keen awareness when it comes to training and development (Shah, 1998). New training and skill development is needed in order to synchronize employees’ work processes, behaviors, and skill sets with that of the distinct values of a shared services unit (Shah, 1998).

Knowledge transfer is another distinct characteristic of the shared services concept. Wang and Wang (2007) offer that services for common functions once provided in original siloed units can now be “shared to reduce business process duplication, increase knowledge sharing through standardization and consolidation of these service processes” (p. 1332), and provide best practices for all stakeholders. Based on empirical support from shared services scholars such as Burns and Yeaton (2008), Shah (1998) and Wang and Wang (2007), it is apparent that the study of the shared services organizational structure in the higher education environment is by all intents and purposes, relevant to the fields of human resource development (HRD) and organizational development (OD), both from a theoretical and practical perspective.

This research also serves to fill the current gap in the HRD and OD literature on the implementation of shared services units in higher education enrollment management divisions. Review of the HRD and OD literature identified discussion of shared services

units as they relate to human resources administrative and transactional functions such as compensation and benefits, staffing, and employee relations (Cooke, 2006; Reilly, 2000; Scully et al., 2010; Ulrich, 1997). HRD and OD literature provided no substantive discussion of the existence of shared services units in other industries or any discussion of the impact of such a complex structure on organizational change and human capital.

This study is unique in that, while the research will be carried out in the context of higher education, its implications are theoretically and conceptually tied to the field of HRD. Another unique and noteworthy element of this research is that it will be one of the first studies regarding the shared services organizational model originating from a human resource development Ph.D. program within a college of business. This study will speak to the point that the phenomenon of shared services can be tied directly to diagnostic and evaluative concepts, theories and structures found within the fields of human resource development and organizational development. This noteworthy accomplishment will lend credibility to the field of HRD by demonstrating the value of the application of HRD theoretical and conceptual frameworks to the phenomenon of shared services.

This study will also contribute to the current literature surrounding the use of the Burke-Litwin Model of OPC in diagnosing and planning organizational change. This study will not refute the accuracy or integrity of the Burke-Litwin Model of OPC; rather, it will address the notion that another factor (employee engagement) may be influencing the relationships between organizational change dimensions within the model.

Practically, this research will impact the way institutional administrators view the implementation of the shared services concept in enrollment management divisions.

Further, this research will demonstrate the applicability of the Burke-Litwin Model of Organizational Performance and Change as a viable tool in guiding enrollment management organization structures.

Definition of Terms

Enrollment Management: A process that brings together often disparate functions having to do with recruiting, funding, tracking, retaining, and replacing students as they move toward, within, and away from institutions (Kurz & Scannell, 2006).

Shared Services: The concentration or consolidation of functions, activities, services, or resources into one stand-alone unit that becomes the provider of the functions, activities, services, or resources to several other client units within the organization (Bergeron, 2003; Fyfe, 2006; Irwin, 2005; NASCIO, 2006; Rahman, 2005; Schulman, Harmer, Dunleavy, & Lusk, 1999).

Employee Engagement: “The simultaneous employment and expression of a person’s preferred self in task behaviors that promote connections to work and to others, personal presence (physical, cognitive, and emotional), and active, full role performances” (Kahn, 1990, p. 700).

Organization of the Dissertation

Chapter one has provided an overview of the background of the problem, the statement of problem, and has articulated the purpose of this study. The chapter also includes the theoretical and conceptual underpinnings from which the study will be grounded. The research questions have also been articulated. An overview of the design has been provided, along with the significance of the study and definitions of pertinent terms. Chapter two provides the relevant domains of the literature that have been

examined in support of this study. Chapter three provides a more detailed articulation about the design of the study as well as the research questions and hypotheses. A more thorough articulation of the population and research sample will be given in addition to a more complete discussion on the data collection and analysis procedures. Chapter four provides an in-depth account of data analysis procedures, hypotheses testing, and details regarding data analysis results. Chapter five provides a summary discussion regarding the overall study and detailed study findings. The chapter discusses conclusions made from the research, as well as implications of the research as it relates to the Burke-Litwin Model of Organizational Performance and Change, scale development, and a discussion of practical application. The chapter also provides limitations to the study and recommendations for future research.

Chapter Two

Literature Review

Introduction

This chapter reviews the relevant literature domains and conceptual framework for studying the shared services concept in the context of higher education enrollment management divisions. Specifically, literature in the domains of higher education, enrollment management, organizational performance and change, resource dependence theory, institutional theory, shared services, management practices, organizational structure, task requirements and individual skills/abilities, motivation and employee engagement have been studied.

The chapter contains eight sections that discuss the current state of higher education, origins of Enrollment Management, the impetus for organizational change strategies in higher education, the shared services model, the theoretical framework for discussing organizational change and a summary. The first section, *Current State of Higher Education* will discuss the fiscal and academic health of higher education in the United States. The second section, *Origins of Enrollment Management* will define enrollment management and discuss the conceptualization and theories behind its creation. The third section, *Impetus for Organizational Change Strategies in Higher Education* will describe how higher education is altering the way it operates due to increased economic uncertainty, fluctuating global financial markets and demographic shifts. The fourth section, *Shared Services Model* will discuss the conceptualization and theories behind such a model and define it succinctly. This section will also further review literature explaining the rationale for implementing this particular structural model within organizations and discuss its efficiencies and effectiveness.

The fifth section, *Theoretical Framework*, will review the theoretical underpinnings of organizational change. To better understand and demonstrate the causal nature of organizational change in higher education, the paper will draw upon a multidimensional theoretical framework including organization change, resource dependency theory, and institutional theory. The sixth section, *Conceptual Framework* will provide a detailed description of the Burke-Litwin Model of OPC and will offer in-depth discussion on four of the model's constructs (e.g., management practices, structure, task requirements and individual skills/abilities, and motivation). This section will also review the construct of employee engagement as a possible moderator of the relationships among the model constructs. The last section, *Summary* will provide a summary of the review of research literature.

In order to conduct research in relevant literature domains, a number of outlets were utilized. First, keywords such as “organizational change,” “shared services,” “enrollment management,” “Burke-Litwin,” “dependence theory,” “institutional theory,” “leadership,” “task requirements and individual skills/abilities (job-person match,)” “motivation,” and “employee engagement” were formulated to guide the search for literature containing relevant information pertaining to the study topic. Databases including *Science Direct*, *Business Source Complete*, *Emerald* and *SpringerLink* were utilized to search for academic journals, e-books, textbooks, white papers, dissertations and websites that contain substantiating literature in a variety of industries including higher education, business, human resource development and information technology.

Current State of Higher Education

When discussing the current state of higher education, this paper will review the current U.S. economic climate, current business practices of higher education institutions,

and national and regional demographics. Higher education is now operating like a private business in many instances in order to remain competitive. In many cases, financial and managerial protocols of corporate America have been implemented to keep up with the high stakes game of providing higher education at low rates while still making a profit (Gumport, 2001). According to Lovett, Newman, and Couturier (2002), strategies that are being implemented across the country look very familiar to those strategies implemented during the recessions in the 1970s, 1980s, and 1990s. The general discussions within the higher education community and by external constituents basically describe “hunkering down” in the face of circumstances beyond higher education's control, not about rethinking what public colleges and universities do and how they do it” (Lovett et al., 2002 p. 2). Lovett et al. (2002) also suggest that sustaining success during strained economic times is about focusing on the short-term and not the long term. Institutions are encouraged to reduce expenditures in the short term while not necessarily being concerned about increasing institutional productivity in the long term (Lovett et al., 2002). Institutions are also economizing in areas such as building maintenance and research, where fewer state appropriations and tuition revenues are spent (Lovett et al., 2002).

According to the College Board, appropriations from state governments have not risen at the same rate as enrollments (Baum, Ma, & Payea, 2012). Historically, state appropriations have been a major source of revenue for public colleges and universities, which, some say, have allowed institutions to charge tuition far below the actual cost of educating students (Baum et al., 2012). “Appropriations per full-time equivalent student were about \$8,300 in 1980-81, \$8,800 in 1990-91, \$9,300 in 2000-01, and \$7,200 in

2010-11” (Baum et al., 2012 p. 10). As state appropriations have decreased, public four-year colleges and universities have made up for lost revenue by increasing tuition rates. “The College Board reports that on average, over the decade from 2001-02 to 2011-12, in-state tuition and fees increased at an annual rate of 5.6 percent beyond general inflation, a more rapid rate of growth than in either of the two preceding decades” (Baum et al., 2012). *The Chronicle of Higher Education* reports that “public colleges and universities must contend with proliferating numbers of for-profit and virtual competitors, all the while they are struggling among themselves for better students and faculty members, more money for research, higher rankings, and winning athletic teams” (Lovett et al., 2002, p. 4).

According to The Western Interstate Commission for Higher Education (WICHE) (2012), the production of high school graduates nationally will slow moderately between 2008-09 and 2014-15 and will continue that trend over the following decade. The U.S. is seeing the first overall decline of high school graduates in over a decade (WICHE, 2012). WICHE (2012) suggests that colleges and universities that are used to planning for increases in high school graduates filling their classrooms will need to adjust to the decline and prepare for the financial impact. State and regional demographic trends must also be considered when discussing changing demographics. WICHE (2012) breaks down the nation into four specific categories; the Northeast, Midwest, South, and West. WICHE (2012) predicts that the Northeast will graduate substantially fewer students between 2007-08 and 2021-22, equal to a one percent drop each year. The Midwest will see the number of graduates decrease by over 60,000 by 2014-15. According to WICHE (2012), the South will continue to see an increase in graduates until 2021-22. The West

peaked in 2008-09 with over 803,000 graduates and will continue to decline until 2014-15. After 2014-15, the West will see a significant increase in graduates and they will continue to grow. The West is considered to be the region to watch with significant increases in population, thus affecting overall graduation rates.

Race and ethnicity also play a major role in the changing demographics discussion. According to WICHE (2012), in recent years the U.S. has been dominated by immigrants from Latin American countries, especially Mexico. The total number of Hispanic graduates will be approximately 21 percent higher in 2014-15 than in 2008-09; by 2019-20 the number of graduates is expected to reach 41 percent. WICHE (2012) projects that by 2020-21, white non-Hispanic students will no longer be the majority in the nation's public high schools (WICHE, 2012).

Origins of Enrollment Management

In order to understand the origins of enrollment management, an historical perspective of the nature of the disparate departments that make up an enrollment management unit must first take place. According to O'Reilly (2010), the term "organizational silo" has been utilized in business journals and writings since the early 1980s. The term *silo* was borrowed from the agricultural industry to describe "distinct business segments that lack effective communication and cooperation and are typified by the "right hand not knowing what the left hand is doing" (O'Reilly, 2010, p.8). The term "silo approach" is used in the context of higher education enrollment management in order to describe separate departments in a college or university that are dedicated to recruiting students, coordinating admissions processes, providing financial aid for students, advising students on the path to a degree, registering students for coursework,

and a plethora of other student services (Schulz & Lucido, 2011; Kilgore, n.d.). Gulati (2007) explains that these individual units are generally focused on perfecting their products and processes but focus little attention on how collaboration across departments might provide more value to the end user. Enrollment management, as we know it today, has evolved from its simplistic beginnings of departmental silos to a sophisticated mix of strategic maneuvers including everything from admissions departments to campus marketing and research units (Schulz & Lucido, 2011).

What is Enrollment management? According to Kurz and Scannell (2006), enrollment management (EM) is a process that brings together often disparate functions having to do with recruiting, funding, tracking, retaining, and replacing students as they move toward, within, and away from institutions. Kemerer, Baldrige, and Green (1982) published the first book about enrollment management entitled *Strategies for Effective Enrollment Management*. The authors defined enrollment management as an “assertive approach to ensuring the steady supply of qualified students required to maintain institutional vitality” (Huddleston, 2000, p. 65). Other authors such as Dolence (1993) defined enrollment management as a “comprehensive process designed to help an institution achieve and maintain the optimum recruitment, retention, and graduation rates of students” (Huddleston, 2000, p. 65). Dolence (1993) further described EM as an “institution-wide process that embraces virtually every aspect of an institution’s function and culture.” (Huddleston, 2000 p. 65). According to a national study conducted by Huddleston and Rumbough (1997), seven functional areas were most frequently identified as enrollment management units by colleges and universities. The areas

included admissions, registrar, financial aid, student orientation, marketing, retention and advising, and institutional research and planning (Huddleston et al., 1997).

According to Coomes (2000) and Henderson (2008), prior to the expansion of higher education following World War II, recruiting students was the responsibility of the president and faculty, while admission officers and the registrar were considered the institutional gatekeepers (Shulz & Lucido, 2011). Kurz and Scannell (2006) pose that following the unprecedented growth of higher education after World War II, demographic forecasts were dire and the quality of American education took on a new national significance as evidenced in the U.S. Department of Education's report, "A Nation at Risk." These factors along with the emergence of for-profit institutions as competitors, led senior institutional officers and governing boards to re-review the trajectory of higher education and how it would maintain its success in an ever-changing, unpredictable environment (Kurz & Scannell, 2006). Kurz and Scannell (2006) suggest that enrollment management was a logical response for higher education when suddenly the marketplace changed and the prospective student had the upper hand (Kurz & Scannell, 2006). Admissions directors transitioned from gatekeepers to salesmen. Many researchers and members of the higher education community say that it is all in the numbers and that EM is the business of selling education (Kurz & Scannell, 2006; Schulz & Lucido, 2011). Similarly, Huddleston (2000) offers that enrollment management developed in response to increasing new student enrollments. The concern to accommodate a growing number of students enrolling in college and to adequately manage the recruiting of new students led to the creation of "an operational unit that would increase the integration, efficiency, and effectiveness of key operations; improve

tactics and strategies of those areas to strengthen articulation with prospective students; and following enrollment, enhance the retention of those new students” (Huddleston, 2000, p. 66). The Enrollment Management unit in higher education initially developed within private institutions, but soon spread to public institutions and eventually gained popularity among two-year colleges (Huddleston, 2000).

Once enrollment management emerged onto the higher education scene, there was a need for the separate and distinct departments within the EM unit to come together and work with a cohesive mission in mind. There was now a need for each autonomous area to show regard for other departments, their respective procedures and how those procedures would affect one another. According to higher education consultants Noel-Levitz (2009), if institutions are not encouraging cohesive messages and goals for all of its departments or units, strategic recruiting and enrollment efforts are often in vain. Noel-Levitz (2009) acknowledges that while many institutions have become increasingly sophisticated and proactive in managing their enrollment outcomes, the silo approach is proving to be ineffective. Different divisions and departments within institutions often continue to set goals and pursue objectives without reference to a broader strategy that acknowledges their underlying interconnectedness (Noel-Levitz, 2009). Further, they suggest that this approach leads to institutions mistakenly assuming that their enrollment management department can single handedly cultivate enrollment plans without the input from other departments on campus (Noel-Levitz, 2009). Many institutions are learning that this approach is not completely effective and that other shareholders of the institution must have some sort of inclusion in the process (Noel-Levitz, 2009). Individuals at Management Consulting Partners (n.d.) have introduced a comprehensive list of mistakes

often made by institutions who utilize the silo approach to strategic enrollment management. Some of the common mistakes are that most processes are not formally designed, there is insufficient staff training, there are frequent disconnects between departments, and the customer is given very little attention.

The deliberate collaboration of departments within the enrollment management unit has become known as strategic enrollment management. In the last five to ten years, strategic enrollment management (EM) has taken on a new significance and is playing a more prominent role in post-secondary institutions (Bischoff, 2007). Senior administrators at many colleges and universities have realized that it was one thing to sell the product based on its own merits, but it is a guaranteed formula for success if efforts were made to strategically market the sale, court prospective students vigorously, seal the deal with attractive admissions offers, provide attractive incentives to convince students to stay and ultimately graduate them. According to Goff, Gragg and Montgomery (2009), institutions are implementing many of the basic fundamentals of strategic EM by setting enrollment goals, aligning those goals with the institution's vision, mission and values, developing action plans with specific tactics and timelines, formulating strategies based on data, and enhancing the educational experience for students.

The term strategic enrollment management may sound foreign to many, but to leaders in higher education, they are the code words for "sealing the deal." According to Kurz and Scannell (2006), strategic EM requires that a number of components co-exist to create a blueprint for the institution to follow. They suggest that an institution must first organize its departments to facilitate the flow of information and make decision making easier (Kurz & Scannell, 2006). An integrated student database must be implemented in

order to coordinate research, planning, recruitment and communication efforts (Kurz & Scannell, 2006). They also advise that marketing is a key element of the sales pitch and that financial aid strategies are also important and necessary when trying to attract students and retain them (Kurz & Scannell, 2006). According to Huddleston (2000) “the quality of the students’ collegiate experience is based largely on the academic environment, operational excellence of the institution’s transition programs, student services, and personal development opportunities” (p. 65). The strategic management of the units within enrollment management is the most important factor affecting the growth of an institution, its financial health and most importantly, student satisfaction (Huddleston, 2000).

Impetus for Organizational Change Strategies in Higher Education

External drivers of change. While higher education consultants and strategists review the state of enrollment management and suggest new centralized structures, we must ask ourselves what is the catalyst for this change and why are we seeing increased efforts to make transformations on higher education campuses? Could it be that it is a combination of economic forces, changing demographics, changing paradigms of the importance of customer-centricity versus product-centricity, technology, or internal, campus-centric forces? Hannan and Freeman (1984) argue that “pressures for accountability are especially intense when organizations produce symbolic or information-loaded products (e.g., education, branded products vs. bulk goods)” (p. 153). Experts at Management Consulting Partners (2009) suggest economic forces including increased economic uncertainty, fluctuating global financial markets, employment shifts, and increased debt are all tell-tale signs of changes in operations at institutions of higher

learning. Kezar (2001) suggests that “change should be engaged in only if the environment legitimately challenges the organization’s key mission or expertise” (p.9).

Kurre (2012), National Managing Partner at Grant-Thornton, a U.S. audit, tax and advisory organization claims that is exactly the case. He suggests that colleges and universities with the greatest resources and strongest brands are experiencing an accelerated pace of change. Kurre (2012) contends that changes are driven simultaneously by market pressures, which include demands and expectations of students and faculty and higher education’s response to price pressures, competition from for-profit institutions, reduced state appropriations, and ethical and regulatory concerns.

Two of the foremost economic challenges facing students and the higher education community include access and affordability (Ladd, 2012). According to Ladd (2012) a college education is increasingly unaffordable for students and their families. According to Ladd (2012), since 1980, the annual cost for private college education has gone from under 80 percent of per capita income to 112 percent, while public college costs have risen from 40 percent to 49 percent. Ladd (2012) also stresses that the very same federal financial aid programs that have sustained students over the last decade, are the very ones that may not withstand their current levels, thus putting greater emphasis on the affordability factor.

While tuition costs rise at colleges and universities, students are relying on federal financial aid dollars to help cover those costs. According to the College Board, during the 2011-12 academic year, \$236.7 billion in financial aid was issued to undergraduate and graduate students in the form of loans, grants, work-study programs, federal tax credits, and deductions (Trends In Student Aid, 2012). The College Board also

recognizes that an additional \$8.1 billion in private, state and institutional educational assistance was given to students during that same year (Trends In Student Aid, 2012).

College Board statistics show that during the 2010-11 academic year, approximately 57 percent of students who earned bachelor's degrees from public institutions at which they began their higher education pursuits, were in debt when they graduated (Trends In Student Aid, 2012). The average debt of these students was \$23,800, an increase from \$20,100 during the 2000-01 academic year (Trends In Student Aid, 2012). Glenn Reynolds (2012), the Beauchamp Brogan Distinguished Professor of Law at The University of Tennessee, explains that with the rising cost of tuition perpetuating the student loan debt crisis, we now have a situation where there are more indebted graduates than there are jobs to help them repay the loans.

Demographics are also a potential catalyst for organizational transformation in higher education. Changing demographics is a real issue of concern for higher education. According to WICHE (2012), the production of high school graduates will slow moderately between 2008-09 and 2014-15. WICHE (2012) also indicates that the nation is closing in on "majority-minority" status relative to public high school graduating classes, in which the number of graduates who are not White non-Hispanic exceeds the number of graduates who are. According to WICHE (2012), the nation has a track record of underrepresenting Black non-Hispanic, American Indian, Alaska Natives and Hispanics, thus, perpetuating the gap between educational attainment. Today's global economy, rewards those societies with knowledgeable and skilled workers, thus, it is imperative for the nation to focus its attention on recapturing its competitive advantage (WICHE, 2012). David A. Longanecker, President of the Western Interstate Commission

for Higher Education, contends that the nation can no longer afford to maintain the status quo but must discover new ways to deliver quality curricula, provide exceptional student services, and explore ways to remove financial barriers to obtaining college degrees (WICHE, 2012). Longanecker also poses the question of whether institutions will review their admission standards and financial aid policies in order to accommodate the demographic shifts that are being predicted (WICHE, 2012).

According to Reynolds (2012), utilizing technological advances is higher education's way of reacting to the higher education bubble. Reynolds suggests that since tuition is overpriced and students are facing unprecedented indebtedness, they are looking for alternative ways to receive an education for significantly less or free altogether (Reynolds, 2012). According to Ladd (2012), "the technology revolution is occurring within colleges and universities more than any other industry" (p. 3). Education is becoming disassociated from geographical limitations and is now offered anytime and anywhere (Ladd, 2012). Such is the case for MIT, Harvard, and Northeastern University. MIT and Harvard are now offering massive open online classes (MOOCs), while Boston-based Northeastern University has opened a branch campus in North Carolina with plans for another in Seattle. Another example of taking the campus to the student was realized when former Stanford computer science professor, Sebastian Thrun established Udacity, which offers low-cost online classes (Ladd, 2012). These are just some of the colleges and universities that are embracing technology and online learning.

Ladd (2012) offers that the increased pace at which technology is being utilized on college and university campuses is a direct response to the U.S. economic climate. It is believed that technological advances made in the classroom will lower operating costs,

allow for a wider range of delivery methods and provide network access to more academic resources than ever before (Ladd, 2012). Higher education administrators have recognized that integrating information technology into the classroom is not only the way of the future, but an absolute necessity if institutions plan to remain competitive within the global online education arena. In order to remain relevant and compete with the likes of for-profit schools such as Kaplan University, Strayer University, and the University of Phoenix, institutions must embrace cutting edge technology and discover alternative methods of delivering quality education to the masses.

Internal drivers of change. Institutions deal with their own campus-centric forces that often require a transformation of the organizational structure. According to Zajac and Kraatz (1983) “organizations are often heavily influenced by institutional environments that dictate how legitimate, successful organizations should look and behave, and constrain the ability and motivation of their decision makers to conceive of and implement certain types of organizational change” (p.85).

According to Oliver (1997), there are three major sources of direct pressure on institutionalized practices and norms; functional, political, and social sources. Functional pressures are described as perceived problems in performance level or the perceived efficacy and effectiveness of institutionalized practices (Dacin, Goodstein, & Scott, 2002). The second set of pressures, are political pressures (Dacin et al., 2002). These pressures are described as forces created due to “shifts in interests and underlying power distributions that have supported and legitimated existing institutional arrangements” (Dacin et al., 2002 p. 46). Political shifts may occur in response to environmental changes, performance crises, or any other issue that forces the organization to question

the legitimacy of certain practices (Dacin et al., 2002). Oliver (1997) discusses a third pressure known as social pressures. Oliver (1997) and Scott (2001) further clarify that social pressures are usually related to the differentiation of groups, the existence of heterogeneous, conflicting or acrimonious beliefs, and practices that impede the continuation of a practice.

Shared Services Model

In order to accomplish monumental goals that include surviving a weakened economy, sustaining success with fewer state appropriations and remaining competitive with other state and private colleges and universities, institutions of higher education are forced to act more strategically when it comes to enrollment practices. Critical on the list of “to do’s” is the push to restructure the enrollment management component at institutions to provide for the ease of admission, easy access to student services and to support retention efforts. According to Schulz and Lucido (2011), many colleges and universities are shifting to centralized enrollment divisions in the place of decentralized enrollment systems that consist of fragmented silos. Institutions are evolving to more strategically compete for students’ tuition dollars by centralizing their enrollment units. This restructuring is said to more effectively manage decreases in state appropriations and focus more on the dependence on students and the revenue they provide (Schulz & Lucido, 2011).

Evidence from Noel Levitz’s 2004 National Enrollment Management Survey (NEMS) also suggests that colleges and universities that are poised to succeed are shifting to centralized shared services models (Schulz & Lucido, 2011). Higher education administrators, consultants, and strategists believe that the enrollment

management silo approach is not effective any longer. They suggest that a shared services approach is the way of the future and an integral part of strategic enrollment management (Noel-Levitz, 2009). To better understand why experts in higher education support the shared services model, we must first have a clear understanding of its definition, origin, and specific properties.

According to Dove (2004), shared services is the concentration of company resources performing like activities, typically spread across the organization, in order to service multiple internal partners at lower costs and at higher service levels, with the common goal of delighting external customers and enhancing corporate value. Derven (2011) offers that shared services is an organizational structure that consolidates delivery of one or more support functions that is designed to achieve cost reductions, economies of scale and improved service. Others such as Burns and Yeaton (2008) define shared services “as the concentration or consolidation of functions, activities, services, or resources into one stand-alone unit” that “becomes the provider of the functions, activities, services, or resources to several other client units within the organization” (p. 9). The shared services concept is not only a resolution to transactional or transformational change issues; it is a strategic initiative to organizational restructuring. The strategy includes schematically organizing the internal business processes of multiple units into one, streamlined unit (Stoyanoff, 2012). Bergeron (2003) explains that the new streamlined unit has its own management structure and is a business partner to the other units instead of just a service provider (Stoyanoff, 2012). The shared services model should not be confused with centralization. Ulrich (1995) shares that centralization is where centralized units control resources, dictate rules and policies and push activities to

the reporting units. On the contrary, the shared services concept allows for resources to be shared and rules and policies are created by all units involved (Ulrich, 1995).

Since the shared services model is relatively new in higher education, we turn to other industries to glean knowledge from their literature and the practical applications of the phenomenon in areas such as human resources, information technology, and procurement. The shared services concept became a popular business model in the late 1980s and early 1990s, and according to Albrecht, Goldstein, Pirani, and Spicer (2004), it continues to be a business model used by more and more organizations. In 2010, the Share Services Institute surveyed 160 organizations across 20 industries in North America and learned that the implementation of shared services in organizations has risen 39 percent each year since 2007 (Scully & Levin, 2010). Scholars such as Walsh, McGregor-Lowndes, and Newton (2008) and Wang and Wang (2007) offer that shared services concepts are most commonly found in human resources, information technology, financial services, and facilities management arenas. Thus, the shared services model is generally found in the private sector, as evidenced in companies such as General Electric, Ford, Pacific Bell, and Bristol-Myers-Squibb (Stoyanoff, 2012). Other companies such as Johnson & Johnson, Shell, and Boeing, currently utilize shared services centers to enhance operations. Johnson & Johnson operates an accounts payable shared services unit and serves as the North American paying agent for the Johnson & Johnson Family of Companies (Johnson & Johnson Services Inc., 2013). Shell operates six business service centers around the world that offer services in Finance, HR, and IT (Shell Global, 2013). Boeing currently operates a shared services center that provides services in the areas of HR, facilities management, transportation and procurement (Boeing, 2013).

According to Bergeron (2003), the functions of a shared services unit are unique in that the semi-autonomous unit provides collaborative strategies to maximize efficiency, cost savings and service. Ulrich (1995) and Mergy and Records (2001) describe its function as a center that handles transactional based processes, such as high routine, high volume activities or one that manages transformational processes, such as those that require a high level of expertise and a specialized skill set. This study focuses on the transactional processes in the discussion of the function of a shared services center. Ulrich (1995), Forst (2001), and Janssen and Joha (2006) point out that the shared services concept provides the benefit of lowering operating costs, reducing the number of employees required to do the work, brings out efficiency, and increases service quality and service delivery.

Janssen and Joha (2006) posit that shared services centers offer a number of benefits. Organizational departments are able to leave the management of administrative functions to the shared services center so their chief focus is on customer needs. Shared services centers also eliminate the duplication of staff functions and lower risks when developing new initiatives or innovations (Janssen & Joha, 2006; Ulbrich, 2003). These units also function to handle transactional based processes such as high routine, high volume activities (Mergy & Records, 2001; Ulrich, 1995). Albrecht et al. (2004) also contend that shared services units reduce costs by sharing infrastructure, hardware, and software.

While many scholars are proponents of the shared services concept, there are others such as Fyfe (2006) that discuss the negative aspects of such a model and why its implementation is often unsuccessful. Fyfe (2006) believes that the shared services

model is difficult to implement in the public sector, because there is generally a lack of up-front investment monies and a lack of commitment to the long term change initiative. Su, Akkiraju, Nayak, and Goodwin (2009) proffer that implementing shared services concepts incur a number of risks including “over standardization of systems and process, lack of operational flexibility, unbalanced power concentration, increased system complexity, unclear service accountability, dampened employee morale, ineffective communication, unexpected implementation cost escalation, and long project timelines,” thus creating limited user satisfaction (p. 383). Glenn (2009) also adds that another risk includes concerns by employees about loss of control over job functions and loss of job security. Accenture, one of the world’s leading management consulting companies, argues that there are certain risks that come with implementing a shared services unit (Accenture, 2005). Some of the risks include a fundamental lack of the management skills required to sustain such a unit, a lack of a governance structure or clear lines of accountability, insufficient staffing and lack of staffing with appropriate skills, and a lack of buy-in from unit stakeholders (Accenture, 2005).

As of late, the shared services concept is becoming more popular in the public sector and especially in higher education (Stoyanoff, 2012). According to *The National Strategy for Higher Education to 2030* (2011), the shared services concept is being implemented at an increasing rate in higher education. In recent years, higher education has embraced the concept of shared services, yet only recently has the idea trickled down to the student services component of institutional campuses. Glenn (2009) shares that the first attempts to implement the concept of shared services on higher education campuses was in the areas of information sharing and library resources. The shared services model

has been implemented at such higher education institutions including The University of Texas at San Antonio, the University of Minnesota, and The University of Tennessee, to name a few (The University of Tennessee, 2013; The University of Texas at San Antonio, 2013; University of Minnesota, 2013).

According to Glenn (2009), the four shared services models that generally appear on higher education campuses include a “multi-campus system model, a consortium of independent institutions model, an intra-campus service provider, and a general market third party provider. This study will explore the shared services model as an intra-campus service provider.

Very little academic research has been done on the concept of shared services in the context of enrollment management divisions in higher education. This lack of empirical research has produced a significant gap and opportunity for an industry where the shared services phenomenon is rapidly growing. It is important to discuss the shared services organizational structure in the context of higher education, as the industry offers a unique set of internal and external constraints such as accreditations, legislatures, bureaucratic and collegial systems and boards and foundations (Kezar, 2001). Kezar (2001) warns that administrators must take a distinctive approach to change in higher education. He contends that change processes that overlook the unique characteristics of higher education could surely end in failure (Kezar, 2001). Kezar (2001) offers eight specific features of higher education that must be considered when implementing major change initiatives:

Interdependent organization: Higher education does not operate independently of disciplinary societies or the federal government

Unique culture of the academy: Higher education cultures are characterized as being collegiate, political; a form of organized anarchy or a bureaucracy

Institutional status: Higher education is an institution. Institutions serve longstanding missions, are closely tied to societal needs and have set norms

Values-driven: Colleges and universities often have complex and contrasting beliefs systems that guide and shape their culture and structures

Multiple power and authority structures: Colleges and universities rely on referent and expert power. Referent power results from the willingness to be influenced by another because of one's identification with them, while expert power is reflected when one person allows themselves to be influenced because the other person apparently has some special knowledge.

Organized anarchical decision-making: Organized anarchies are inherently ambiguous with regard to goals, technology and participation. There is ambiguity as to who holds authority in higher education institutions.

Professional and administrative values: Administrative power is based on hierarchy and bureaucracy. Professional authority is based on knowledge, autonomy and peer review.

Shared governance: Major functions and decisions of the institution are shared between faculty and administrators (p. 59-73).

The concept of shared services is not new to industry. In fact, the shared services concept has been around for close to fifty years (Schmidt, 1997). The concept emerged when American companies began dismantling top-heavy organizations in order to create consolidated business units (Schmidt, 1997). The shared services concept has been implemented in both the private and public sectors in areas such as human resources (HR) and information technology (IT) (Cooke, 2006; Janssen & Joha, 2006). Some of the organizations and companies that have implemented this type of organizational structure include IBM, Pacific Bell, Johnson & Johnson, Mobil, Barclays, Motorola, Compass Group, Shell, Compaq, Allied Signal Inc., Ontario Government of Canada, IBM and Amoco (Cooke, 2006; Forst, 2001; Schmidt, 1997; Ulrich, 1997).

The shared services concept is no stranger to higher education. Several higher education institutions have implemented the shared services concept on their campuses in areas including administrative services, HR and IT. Institutions such as Yale, Cornell, The University of Texas and the University of Michigan have implemented this type of consolidated business structure (Administrative Services Transformation, 2013; Cornell University, 2013; The University of Texas, 2013; Yale University, 2013).

While institutions are looking at the shared services concept to impact efficiencies of their HR and IT units, there has been a recent surge of interest to implement the shared services concept in student services areas such as admissions, financial aid, registration, advising, and student business services (Glenn, 2009). Institutions such as the University of Minnesota, University of Tennessee, and The University of Texas at San Antonio, and the University of New Orleans have implemented shared services business units in their enrollment management divisions (The University of Texas at San Antonio, 2013; The University of Tennessee, 2013; The University of New Orleans, 2013; University of Minnesota, 2013).

In the higher education industry, a plethora of opinion-based reports, editorials and white papers exist to declare the necessity of the shared services unit as an integral component of enrollment management efficiency and effectiveness models. Some of these reports include Stony Brook University's *Report on Shared Services* (2012), *Shared Services Opportunities in Higher Education* by Management Consulting Partners (n.d.), Glenn's (2009) *Shared Enrollment Services as a Potential SEM Strategy*, Deloitte's (2011) *Shared Services in the Higher Education Sector*, Johal's (2013) *Higher Education*

Institutions Take the Next Step With Shared Services, and Metnick et al.'s (2012) *Achieving New Efficiencies in Higher Education*.

Higher education consultants, service providers, and trainers such as Noel Levitz, Academic Impressions and Innovative Educators, often promote the use of shared services in higher education units on university campuses (Academic Impressions, 2014; Innovative Educators, 2014; Noel Levitz, 2014). However, these organizations provide no substantive academic, empirical, or theoretical evidence indicating the necessity for such units or a best practices implementation protocol. While it has become imperative for higher education to function more like a business in today's marketplace, borrowing organizational structural concepts from other industries may prove to be problematic without substantial theoretical foundations and empirical studies to support this specific change structure.

Another gap exists in terms of evaluating the critical role specific constructs such as management practices, structure, task requirements and individual skills/abilities, motivation, and employee engagement play in the change process. Further, limited outcomes-based research has been done that demonstrates the impact of this relatively new phenomenon of shared services on individual motivation in the context of higher education enrollment management.

Theoretical Framework

Organizational change. This section will provide a brief overview of notable organization change literature. A number of definitions of organizational change exist. Burnes (1996) offers that organizational change refers to modifications within an organization including changes among individuals and across the entire organization.

Van de Ven and Poole (1995) offer that change is the observation of difference over time in one or more parts or elements of an organization.

The work of Lewin (1947) provides a foundation for organization change in this study. Lewin (1947) offered that in order for the change process to be successful, a three-step procedure must be followed: unfreezing; moving; and refreezing. Lewin (1947) suggested that in the first step, the current level of behavior must be unfrozen in order to move toward the second step, which is the desired new level of behavior. The third step, refreezing, creates ways to make the new level of behavior “relatively secure against change” (Lewin, 1947, p. 344).

Schein (1987) added to Lewin’s (1947) work by claiming that the change process is more elaborate and complicated than three simple steps. Schein (1987) called the steps “stages” and added that they overlap. In Stage 1, Schein (1987) offered that there are three ways to unfreeze an organization: disconfirmation; induction of guilt or anxiety; and creation of psychological safety. Stage 2 involves two processes that are necessary in order for organizational members to see things differently than they saw them before (Schein, 1987). He suggests that organizational members identify a new model or leader and scan the environment for new information relevant to the change (Schein, 1987). Last, Stage 3, refreezing, is the integration of the change for organizational members. He suggests this process is completed in two steps; linking the new behavior with the member’s self-concept and ensuring that the new change fits well with others in the organization (Schein, 1987).

Resource dependency theory. Enrollment Management Divisions in higher education institutions are changing their organizational structures to include shared

services centers at an increasing pace. Institutions are foregoing the old silo approach to serving students and are thinking in terms of new, consolidated service delivery systems. While EM divisions are changing rapidly, it is not completely apparent whether the impetus for change is due to the external environment or whether they are utilizing a copy-act approach to change. Understanding resource dependency theory (RDT) will aid in providing a framework from which to view the motives for organizational change and restructuring.

Resource dependency theory will serve to provide a foundation to explain how external environments, competition for resources, and the infusion of market principles have led to a need for organizational restructuring within the enrollment units of higher education institutions (Hillman et al., 2009; Schulz & Lucido, 2011). According to Pfeffer and Salancik (1978), Resource Dependency Theory portrays the corporation as an open system, dependent on possibilities and resources in the external environment. Casciaro and Piskorski (2005) explain that Resource Dependency Theory's central tenant is that an organization's survival is dependent on its ability to acquire resources from the external environment. In order to prevent disruption and avoid uncertainty, organizations often restructure their dependencies by employing a number of strategies and maneuvers (Casciaro & Piskorski, 2005). Those tactics often include decreasing the interest in the external resource, promoting alternative methods to find resources, or forming alliances with others in order to meet the organization's resource needs (Casciaro & Piskorski, 2005). One of the very tenants of Resource Dependency Theory may explain why colleges and universities are looking inward, relying on internal interdependencies to help minimize external dependencies. Pfeffer and Salancik (1978) originally emphasized that

organizations use tactics such as mergers, joint ventures, and inter-organizational relationships to help minimize the loss of external resources.

Hillman et al. (2009) offer that power, one of the core elements of RDT, allows organizations to reduce others' power over them, while often attempting to increase their own power over others in order to meet the organization's resource needs. Emerson (1962) explains that the power of A over B is derived from the control of resources that B values, that are not available anywhere else. Further, Davis and Cobb (2009) explain that "B is dependent on A to the degree that A has power over B," thus the relationship is not one in which exclusive power resides with one party (p. 6). These power relationships are interdependent in nature as each party relies on the other for resources. Casciaro and Piskorski (2005) describe interdependent relationships as mutual dependence and suggest that they create enticement and the capacity to absorb constraint. Kezar (2001) explains that "within resource dependence models, leaders make choices to adapt to their environment" (p. 30). RDT may explain the practices taking place on college and university campuses across the nation. Although external resources are increasingly harder to come by and cost containment is now a mandate from institutional administrators, RDT might explain why colleges and universities are exploring and practicing new, innovative methods to meet their needs and sustain their competitive edge.

Institutional theory. Institutional theory serves to explain why some organizations have gone through structural reorganizations in order to maintain legitimacy and access to resources (Schulz & Lucido, 2011). According to Kondra and Hinings (1998), institutional theory is utilized to explain "the isomorphism of

organizational fields and the establishment of institutional norms” (p. 744). Scott and Meyer (1983) explain that institutional theory suggests that organizational environments are characterized by rules and requirements that organizations must follow in order to receive support and be considered legitimate.

Hinings and Greenwood (1988) describe institutional norms as having to do with domains of operations, principles of organizing, and criteria of evaluation. So the question remains, how and why do organizations conform to these norms? DiMaggio and Powell (1983) suggest that conformity is enabled through three specific processes: normative; coercive; and mimetic processes. Organizations agree to conform to norms for a number of reasons. DiMaggio and Powell (1983), Meyer and Rowan (1977) and Oliver (1991), contend that organizations conform to norms because they simply want to comply, are being practical in their approach to organizational change, want to increase legitimacy or resources, or simply want to survive. Meyer and Rowan (1977) explain that organizations are driven to incorporate the practices and procedures defined by prevailing rationalized concepts of organizational work and institutionalized in society” (p. 340). Organizations that follow this practice “increase their legitimacy and their survival prospects” (Meyer & Rowan, 1977, p. 340).

According to Gates (1997), conformation to norms falls into three distinct categories: normative; coercive; and mimetic isomorphism. Normative isomorphism explains that professional standards in the organizational field pressure organizations to conform (Gates, 1997). Coercive isomorphism is often seen when institutional norms have moral, legal, or economic aspects (DiMaggio & Powell, 1983). Coercion is often applied to new organizations to make an example out of them, to enforce compliance

with existing norms, or to simply encourage involvement (DiMaggio & Powell, 1983). Gates (1997) posits that “coercive isomorphism relates to power and sanctions to bring about organizational conformity” (p. 256). Mimetic isomorphism is generally related to “actions and plans where organizations copy others in their field,” while normative isomorphism is related to a set of professional principles and values within the organizational field that force organizations to adapt (Gates, 1997, p. 256).

Fligstein (1991) suggests that legitimacy can be realized when an organization out-performs another organization. Zucker (1988) says that legitimacy is infectious and that once organizations begin watching the top performer, it is only a matter of time before low performing organizations want to mimic their performance. Kondra and Hinings (1998) caution that once a field becomes saturated with isomorphic organizations, the change may be trendy and has no long-lasting, permanent affects. The organizational change may actually limit its success rather than sustain it (Kondra & Hinings, 1998). Powell (1988) offers that institutionalized environments come at a cost to some organizations. Often, organizational structure and practices are determined by “social fitness rather than economic efficiency” (p. 132). According to DiMaggio and Powell (1991), “structural change in organizations seems less and less driven by competition or by the need for efficiency (p. 63-64). They contend that “bureaucratization and other forms of organizational change occur as the result of processes that make organizations more similar without making them more efficient” (DiMaggio & Powell, 1991, p. 63-64).

Conceptual Framework

The Burke-Litwin model of organizational performance and change. While the theoretical framework describes catalysts of organizational change and those tenants that support it, the Burke-Litwin Model of Organizational Performance and Change (OPC) better demonstrates how organizations function and how they are changed. For this study, the Burke-Litwin Model of OPC will serve to demonstrate the causal nature of organizational change and will aid in identifying the transformational and transactional organizational variables that show cause-and-effect relationships (Burke & Litwin, 1992). Kezar (2001) asks why models of organizational change are necessary or important to understand. She explains that models reveal the driving forces of change, how the change will occur “(the stages, scale, timing, and process characteristics); and what will occur (the content of change, outcomes, and ways to measure it” (Kezar, 2001, p. 25). Further, organizational change models represent “a different ideology with its own assumptions about the nature of human beings and social organizations” (Kezar, 2001, p. 25). Christensen and Raynor (2003) explain that “breakthroughs in predictability occur when researchers not only identify the causal mechanism that ties actions to results but go on to describe the circumstances in which that mechanism does and does not result in success” (p. 71). They argue that good theories are *circumstance contingent*, describe what causes what and why, and also explain how the causal mechanism may produce different outcomes in different situations (Christensen & Raynor, 2003).

Burke and Litwin (1992) created their Model of OPC to serve as a guide for “both organizational diagnosis and planned, managed organization change-one that clearly shows cause and effect relationships and can be tested empirically” (p. 525). The Burke-

Litwin Model of OPC (1992) originated from the work of Litwin et al. (1978). Burke and Litwin (1992) acknowledge that their model, while grounded in open-systems theory and supported by the works of Katz and Kahn (1978) and Burns (1978), is ultimately a result of their consulting practice that has led to the model used today. The model integrates Poras and Robertson's (1987) implementation theory and Woodman's (1989) change process theory. Implementation theory is described as the need to undertake activities that will affect planned change, such as survey feedback (Burke & Litwin, 1992). Change theory refers to specific changes that need to occur as a consequence of the implemented activities (Burke & Litwin, 1992).

Other organization change models such as Pascale and Athos's (1981) 7S model, Weisbord's (1976) Six Box model, and Nadler-Tushman's (1977) model fall short in providing a comprehensive approach to planned and managed change. Pascale and Athos's (1981) 7S model includes such organizational variables as strategy, systems, structure, staff, style, skills, and shared values. However, the model does not include external environment or performance variables (Burke, 1992). The model fails to include how these organizational factors are affected by the external environment, how each of the dimensions affect the other, and which performance indices are involved (Burke & Litwin, 1992). Weisbord's (1976) Six Box model provides a more descriptive depiction of how the role of leadership is responsible for coordinating the remaining five boxes of the model, yet does not follow through to discuss causation or performance outcomes. Contingency models such as the Nadler-Tushman (1977) model and those proposed by Burns and Stalker (1961) and Lawrence and Lorsch (1969) suggest congruence among organizational variables and a cause-effect linkage. However, each of these models fails

to explain which of the organizational variables are central to achieving the desired organizational outcome (Burke & Litwin, 1992).

The Burke-Litwin Model of OPC (Figure 2) depicts how organizational change is impacted more by the external environment than any other factor (Burke & Litwin, 1992). The model demonstrates “the primary variables that need to be considered in any attempt to predict and explain the total behavior output of an organization, the most important interactions between these variables, and how they affect change” (Burke & Litwin, 1992, p. 529).

Figure 2 represents the Burke-Litwin Model of OPC. The model is comprised of 12 organizational variables. The components and their definitions are listed below:

External environment: Any outside condition or situation that influences the performance of the organization (e.g., marketplaces, world financial conditions, political/governmental circumstances) (Burke & Litwin, 1992, p. 531).

Mission and strategy: What the organization’s (a) top management believes is and has declared the organization’s mission and strategy and (b) what employees believe is the central purpose of the organization (Burke & Litwin, 1992, p. 531)

Leadership: Executives providing overall organizational direction and serving as behavioral role models for all employees (Burke & Litwin, 1992, p. 532)

Culture: The way we do things around here (Deal and Kennedy, 1982)

Structure: The arrangement of functions and people into specific areas and levels of responsibility, decision-making authority, communication, and relationships to assure effective implementation of the organization’s mission and strategy (Burke & Litwin, 1992, p. 532)

Management practices: What managers do in the normal course of events to use the human and material resources at their disposal to carry out the organization’s strategy (Burke & Litwin, 1992, p. 532)

Systems (Policies and procedures): Standardized policies and mechanisms that facilitate work, primarily manifested in the organization’s reward systems, management information systems (MIS), and in such control systems as

performance appraisal, goal and budget development, and human resource allocation (Burke & Litwin, 1992, p. 532)

Work climate: The collective current impressions, expectations, and feelings that members of local work units have that, in turn, affect their relations with their boss, with one another, and with other units (Burke & Litwin, 1992, p. 532)

Task requirements and individual skills:/abilities: The required behavior of task effectiveness, including specific skills and knowledge required of people to accomplish the work for which they have been assigned and for which they feel directly responsible (Burke & Litwin, 1992, p. 533)

Individual needs and values: The specific psychological factors that provide desire and worth for individual actions or thoughts (Burke & Litwin, 1992, p. 533)

Motivation: Aroused behavior tendencies to move toward goals, take needed action, and persist until satisfaction is attained. This is the net resultant motivation; that is, the resultant net energy generated by the sum of achievement, power, affection, discovery, and other important human motives (Burke & Litwin, 1992, p. 533)

Individual and organizational performance: The outcome or result as well as the indicator of effort and achievement (e.g., productivity, customer satisfaction, profit, and quality) (Burke & Litwin, 1992, p. 533)

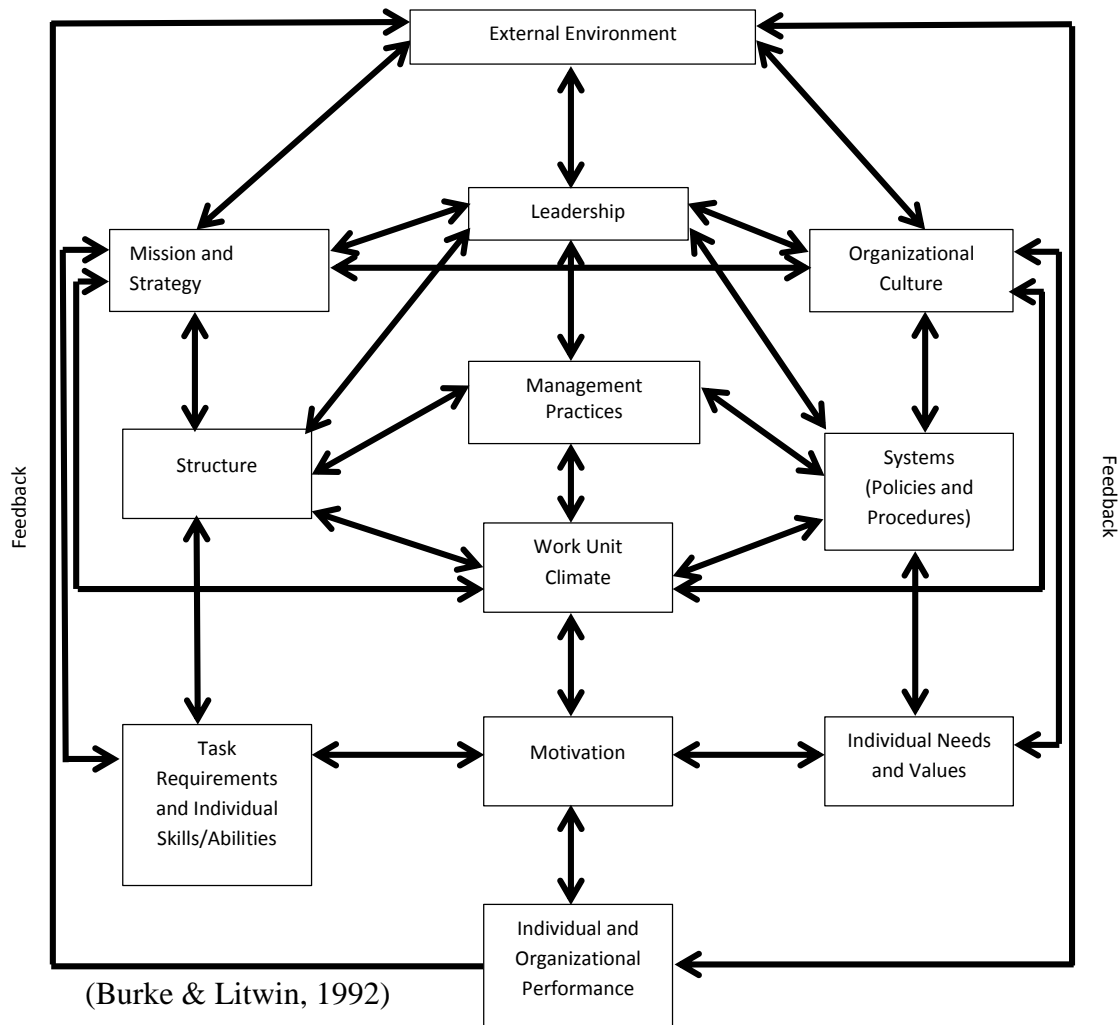
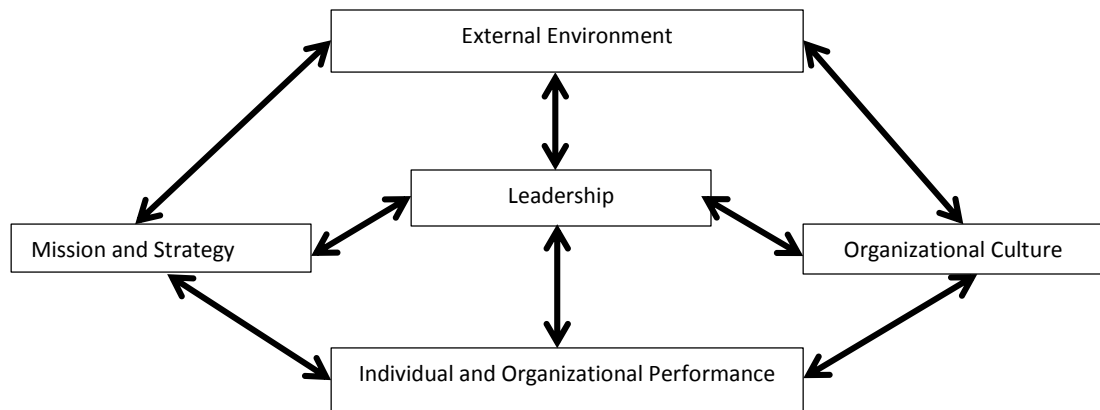


Figure 2
Burke-Litwin Model of Organizational Performance and Change

The top half of the model (Figure 3) identifies transformational variables as “areas in which alteration is likely caused by interaction with environmental forces (both within and without) and will require entirely new behavior sets from organizational members” (Burke & Litwin, 1992, p. 529). These areas include external environment, mission and strategy, leadership and organizational culture (Burke & Litwin, 1992). Changes to any of the transformational variables or a change to this dimension of the model affects the entire organization and would be revolutionary in nature.

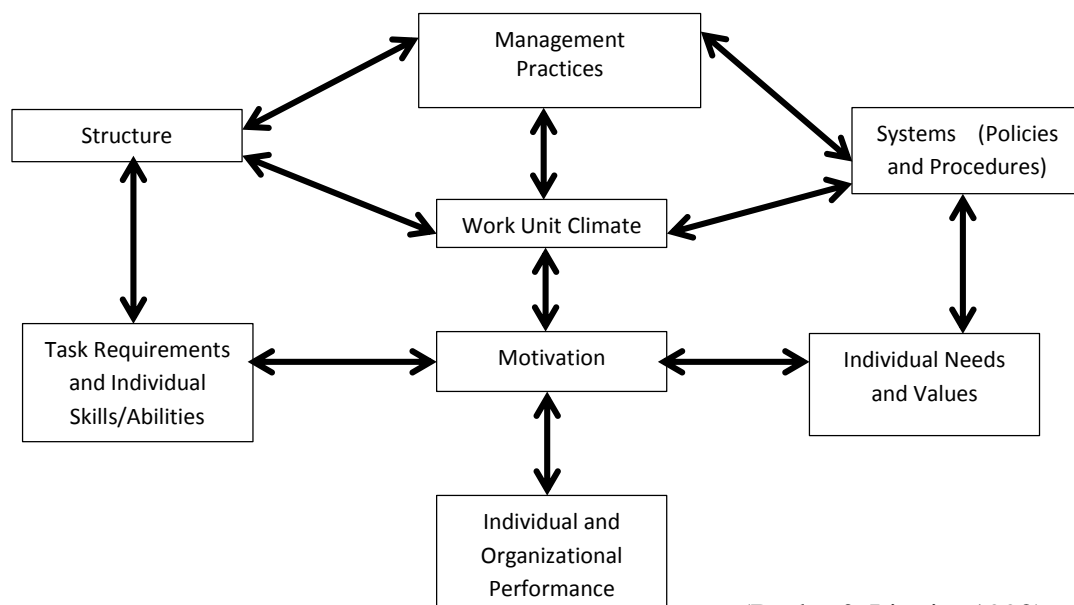
The lower half of the model (Figure 4) identifies transactional variables as areas in which short-term reciprocity among people and groups is the primary way of alteration (Burke & Litwin, 1992). Those areas include structure, management practices, systems (policies and procedures), work unit climate, task and individual skills, motivation, individual needs and values, and individual and organizational performance (Burke & Litwin, 1992). Specifically, the Burke- Litwin Model of OPC utilizes arrows to depict which organizational variables influence other variables more directly (Burke & Litwin, 1992). In basic terms, the external environment box indicates the input and the individual and organizational performance box indicates the output (Burke & Litwin, 1992). The model demonstrates that mission and strategy, leadership, and organizational culture carry more weight than structure, management practices, and systems (policies and procedures), when it comes to impacting organizational change (Burke & Litwin, 1992).

The model continues the same theme throughout, recognizing that some dimensions of the model carry more weight than others and do not impact change exclusively. Burke and Litwin (1992) point out that the left side of the model (mission and strategy, structure and task requirements and individual skills/abilities, and performance) is the portion of the model generally of concern to managers and executives, while the right side and middle of the model (leadership, culture, systems, management practices, climate, individual needs and values, motivation, and performance) are of importance to behavioral scientists.



(Burke & Litwin, 1992)

Figure 3. Burke-Litwin Model of Organizational Performance and Change
The TRANSFORMATIONAL Factors



(Burke & Litwin, 1992)

Figure 4. Burke-Litwin Model of Organizational Performance and Change
The TRANSACTIONAL Factors

The following constructs within the model will be further dissected and explained: management practices; structure; task requirements and individual skills/abilities; and motivation. Discussion will also include the relationships among these constructs. These constructs are of particular interest and are worth clarification, as

they are relevant in the context of the shared services environment within higher education enrollment management units. Shared services literature discusses the impact of management practices, organizational structure, and task requirements and individual skills/abilities on the successes or failures often recognized within this unique type of business unit (Bergeron, 2003; Derven, 2011; Janssen & Joha, 2006; Stoyanoff, 2012).

Management practices. Burke and Litwin (1992) describe management practices as “what managers do in the normal course of events to use the human and material resources at their disposal to carry out the organization’s strategy” (p. 532). These practices include a particular cluster of specific behaviors enacted by managers (Burke and Litwin, 1992). Burke and Litwin (1992) suggest that management practices influence performance when coupled with a positive organizational climate. Burke and Litwin (1992) looked to the work of Boyatzis (1982) and Luthans (1988) in support of this construct. Luthans (1988) based his conclusions on the early work of Henry Mintzberg (1973) and John Kotter (1982). Mintzberg (1973) maintained that a manager’s job consisted of many brief and episodic encounters with people both inside and outside of the organization. Mintzberg (1973) also described managers in terms of the roles they played within the organization: interpersonal roles; informational roles; and decision-making roles. Interpersonal roles included the manager as figurehead, leader, and liaison (Mintzberg, 1973). Informational roles included the manager as monitor or nerve center, disseminator, and spokesman (Mintzberg, 1973). Decision-making roles included the manager as entrepreneur, disturbance handler, resource allocator, and negotiator (Mintzberg, 1973).

Kotter (1982) purported that managers spend most of their time interacting with others during meetings. Thus, he termed these meetings as “network building” (Kotter, 1982). During periods of network building, managers share and offer information and create agendas by connecting goals and addressing the manager’s responsibilities (Kotter, 1982).

Based on the work of Mintzberg (1973) and Kotter (1982), Luthans (1988) explains that there are four managerial activities of real managers: communication; traditional management; human resource management; and networking. Communication consists of “exchanging routine information and processing paperwork” (Luthans, 1988, p. 129). Traditional management consists of “planning, decision-making, and controlling” (Luthans, 1988, p. 129). Human resource management includes “motivating/reinforcing, disciplining/punishing, managing conflict, staffing, and training/developing” (Luthans, 1988, p. 129). Last, networking includes “socializing/politicking, and interacting with outsiders” (Luthans, 1988, p. 129).

Observed behaviors of each of the managerial activities are listed below:

Communication: “Answering procedural questions, receiving and disseminating requested information, conveying the results of meetings, giving or receiving routine information over the phone, processing mail, reading reports, writing reports/memos/letters, routine financial reporting and bookkeeping, and general desk work” (Luthans, 1988, p. 129).

Traditional Management: “Setting goals and objectives, defining tasks needed to accomplish goals, scheduling employees, assigning tasks, providing routine instructions, defining problems, handling day-to-day operational crises, deciding what to do, developing new procedures, inspecting work, walking around inspecting the work, monitoring performance data, and doing preventive maintenance” (Luthans, 1988, p. 129).

Human Resource Management: “Allocating formal rewards, asking for input, conveying appreciation, giving credit where due, listening to suggestions, giving positive feedback, group support, resolving conflict between subordinates, appealing to higher authorities or

third parties to resolve a dispute, developing job descriptions, reviewing applications, interviewing applicants, filling in where needed, orienting employees, arranging for training, clarifying roles, coaching, mentoring, and walking subordinates through a task” (Luthans, 1988, p. 129).

Networking: “Non-work related “chit chat”; informal joking around; discussing rumors, hearsay and the grapevine; complaining, griping, and putting others down; politicking and gamesmanship; dealing with customers, suppliers, and vendors; attending external meetings; and doing/attending community service events” (Luthans, 1988, p. 129).

Boyatzis (1982) focused his work on determining “which characteristics of managers related to effective performance” (p. 229). Boyatzis (1982) offered that these characteristics could be considered as competencies needed in order for the manager to be effective. His work concluded that there are 12 competencies necessary for the manager to be successful: “efficiency orientation; proactivity; diagnostic use of concepts; concern with impact; self-confidence; use of oral presentations; conceptualization for the middle and executive level managers only; use of socialized power, managing group process for middle and executive level managers only; perceptual objectivity; self-control at the trait level only; and stamina and adaptability at the trait level only” (Boyatzis, 1982, p. 229). In linking the manager’s competencies to job demand, Boyatzis (1982) identified five basic functions of management jobs: “planning; organizing; controlling; motivating; and coordinating” (p. 233). Descriptions of the five basic functions include:

Planning: “Determining the goals and plans for the organization and communicating them to others” (Boyatzis, 1982, p. 233).

Organizing: “Determining what human and other resources are needed and how they should be structured to accomplish the plan and achieve the goals” (Boyatzis, 1982, p. 233).

Controlling: “Monitoring the performance of individuals and groups, providing feedback on their performance, and rewarding and disciplining them based on their performance” (Boyatzis, 1982, p. 234).

Motivating: Building “commitment, identity, pride, and spirit in the organization” (Boyatzis, 1982, p. 235).

Coordinating: Stimulating “cooperation among departments, divisions, and other work groups” (Boyatzis, 1982, p. 235).

Boyatzis (1982) points out that ultimately, the manager represents the organization and its products to constituencies both inside and outside the organization.

Structure. In the context of the Burke-Litwin Model of OPC, structure is described as “the arrangement of functions and people into specific areas and levels of responsibility, decision-making authority, communication, and relationships to assure effective implementation of the organization’s mission and strategy” (Burke & Litwin, 1992, p. 532). Burke and Litwin (1992) formulate their description of *structure* by looking to classic work on the topic of organizational structure by Galbraith (1974), Duncan (1979), and Peters (1988).

Galbraith (1974) explains that there are two types of organization design; the information processing model and the mechanistic model. The information processing model describes the need to have structure within the organization in order to mitigate uncertainty of tasks, provide an environment for planning, and limit chaos throughout the organization (Galbraith, 1974). The mechanistic model suggests that coordinated action is necessary across interdependent units within organizations (Galbraith, 1974).

Galbraith (1974) offers that three specific mechanisms allow for coordinated information sharing across units: coordination by rules or programs; hierarchy; and coordination by targets of goals. The coordination by rules or programs mechanism is intended for routine and predictable tasks and for those job related tasks that are generally known in advance (Galbraith, 1974). This mechanism basically explains that role occupants

execute behavior that is appropriate to the task at hand (Galbraith, 1974). The hierarchy mechanism is employed when organizational members face situations that are uncertain and for which there are no predefined set of rules that discuss how to handle these situations (Galbraith, 1974). The hierarchy within the organization is called upon to address these uncertain situations and offer resolution (Galbraith, 1974). The coordination by targets or goals mechanism is employed to prevent seeking out hierarchical input and to prevent constant communication among units within the organization (Galbraith, 1974). This mechanism institutes planning, goal setting, and the identification of specific outputs (Galbraith, 1974).

Duncan's (1979) work addressed two specific questions: "what is organization structure and what is it supposed to accomplish" (p. 59). Duncan (1979) explained that organization structure is more than a drawing on a piece of paper using boxes to describe roles and responsibilities. Rather, he describes organization structure as "a pattern of interactions and coordination that links the technology, tasks, and human components of the organization to ensure that the organization accomplishes its purpose" (Duncan, 1979, p. 59). Duncan (1979) explains that an organization's structure basically has two main objectives; first, to facilitate "the flow of information within the organization in order to reduce the uncertainty in decision making," and second, to "achieve effective coordination-integration" (p. 60). The purpose of organizational structure is to incorporate organizational behavior across various parts of the organization so that it is synchronized and coordinated (Duncan, 1979).

Duncan (1979) further explains that the coordination and integration of organizational behavior is especially important when organizations are made up of units

that are interdependent. Duncan (1979) describes this type of organizational interdependence as *reciprocal interdependence*. Reciprocal interdependence is best described when “the output of Unit A becomes the inputs of Unit B and the outputs of B cycle back to become the inputs of Unit A” (Duncan, 1979, p. 60). When reciprocal interdependencies are at play, more complex coordination is necessary in the form of coordination by feedback (Duncan, 1979). Basically, in order for information to flow back and forth between units that are dependent on one another, channels of communication must be available and open in order to link the units (Duncan, 1979).

Peters (1988) offers that formal, restrictive, and bureaucratic organizations are a thing of the past. Newer organizational structures are flexible, porous, adaptive, and fleet-of-foot. This type of organizational structure impacts employee behavior by providing empowerment, opportunity to be part of the team, and autonomy when it comes to decision-making, thus, resulting in employee motivation (Peters, 1988). Peters (1988) contends that employees who are a part of a flexible, engaging and more representative structure, often become more productive and demonstrate more spirited behavior.

Sherman and Smith (1984) argue that organizational structure can have a significant influence on intrinsic motivation. Highly complex organizations with bureaucratic structures constrain individuals, leading to decreased feelings of self-determination which result in reduced intrinsic motivation (Sherman and Smith, 1984). Sherman and Smith (1984) describe this type of environment as a mechanistic structure that often causes reduced autonomy and freedom, resulting in decreased intrinsic motivation. In contrast, decentralized and less bureaucratic organizational structures

provide greater decision-making authority to individuals, thus positively impacting intrinsic motivation (Sherman and Smith, 1984).

Task requirements and individual skills/abilities (Job-Person Match). Burke and Litwin (1992) offer that the task requirements and individual skills/abilities construct of the model represents mainstream organizational psychology, and therefore, the foundation of the construct is anchored in the literature surrounding job-person match and demands-abilities fit. Burke and Litwin (1992) offer that there is a direct linkage between a person's skills and abilities and job requirements and enhanced motivation.

Job-person fit will be discussed relative to the "tasks performed, not the organization in which the job exists" (Kristof, 1996, p. 8). Job-person (P-J) match is defined as "the relationship between a person's characteristics and those of the job or tasks that are performed at work" (Kristof-Brown, Zimmerman, & Johnson, 2005, p. 284). For the purpose of this study a "job" will be "defined as the tasks a person is expected to accomplish in exchange for employment, as well as the characteristics of those tasks" (Kristof, 1996, p.8). Demands-abilities fit occurs when an "individual has the abilities required to meet organizational demands. (Kristof, 1996, p. 3). Kristof (1996) explains that needs-supplies fit is achieved when an organization supplies "financial, physical, and psychological resources as well as the task-related, interpersonal, and growth opportunities that are demanded by employees" (p. 4).

Demands-abilities fit is achieved when "organizations demand contributions from their employees in terms of time, effort, commitment, knowledge, skills, and abilities," and the employee meets those demands (Kristof, 1996, p. 4). Kristof-Brown et al.'s (2005) meta-analysis of individuals' fit at work revealed that job-person match had strong

correlations with three primary attitudes studied in fit literature: job satisfaction; organizational commitment; and intent to quit.

Lauver and Kristof-Brown (2001) offer that job-person fit positively impacts work attitudes and performance outcomes. Further, employees who develop a good fit with their job remain committed and loyal (Lauver & Kristof-Brown, 2001). The reverse also remains true. Employees who do not find a good fit with their job often look to leave the position or their organization because they are less motivated (Lauver & Kristof-Brown, 2001). Edwards (1991) also contends that positive outcomes of job-person match include increased job performance, job satisfaction, motivation, organizational commitment, attendance, and retention. Positive job-person match also leads to reduced job stress and intentions to quit (Edwards, 1991).

Motivation. In their model, Burke and Litwin (1992) define motivation as “aroused behavior tendencies to move toward goals, take needed action, and persist until satisfaction is attained” (p. 533). Motivation is “the resultant net energy generated by the sum of achievement, power, affection, discovery, and other important human motives” (Burke & Litwin, 1992, p. 533). Burke and Litwin (1992) looked to Evans’s (1986) work regarding motivation to incorporate in their model. Evans (1986) grounded his work on motivation with theories such as expectancy theory (Vroom, 1964), goal setting theory (Locke et al., 1981), achievement theory (Weiner, 1972), and social learning theory (Weiner, 1985). Evans (1986) suggests that “goal setting has its main effects on motivation through the performer’s pride or shame in performance and his or her sense of efficacy or feeling that he or she can function at the desired level of performance” (p. 205).

According to Evans (1986), when discussing motivation, the issues of choice and acceptance must be acknowledged. Motivation is influenced by the goals one chooses or accepts (Evans, 1986). Goals are accepted based on past experience, thus driving individual behavior, which in turn, drives performance (Evans, 1986). Evans (1986) explains that without acceptance of goals, there will be little or no impact on future behavior. Locke et al. (1981) suggest that accepting a goal activates four specific mechanisms: directing attention to relevant aspects of the task, mobilizing effort, generating persistence in behavior, and developing strategies for effective performance. Once a goal is accepted, the level of job performance attained will depend on the individual's "ability and the presence or absence of job constraints" (Evans, 1986, p. 205). If the individual is provided with performance feedback, he or she will compare that to their own expectations of their job performance (Evans, 1986). "Several personal and organizational factors affect the kinds of attributions made" (Evans, 1986, p. 205). The individual then tries to make sense of any discrepancies that may exist (Evans, 1986). The attributions, or qualities of a successful or unsuccessful performance, "affect the person's satisfaction with the present outcome and sense of efficacy for future performance" (Evans, 1986, p. 205). These qualities, along with consequences from earlier performances, join together, "to affect the antecedents of goal choice and acceptance for future tasks" (Evans, 1986, p. 205).

Employee engagement. The purpose of this study is not to refute Burke-Litwin's Model of Organizational Performance and Change, but rather to consider an additional construct as a possible moderator of relationships within the model. This study will review the construct of employee engagement as a motivational variable moderating the

relationships between structure and motivation, structure and management practices, structure and task requirements and individual skills/abilities, management practices and task requirements and individual skills/abilities, management practices and motivation, and task requirements and individual skills/abilities and motivation. The causal nature of the Burke-Litwin Model of OPC has been supported and reinforced by Fox (1990), Anderson-Rudolf (1996), Falletta (1999), Di Pofi (2002), and Stone (2010). Further, the model has been validated as a comprehensive model explaining the impact of the external environment on internal organizational functions, while providing an input-throughput-output format and a feedback loop (Di Pofi, 2002). To better understand the potential moderating effect of employee engagement, foundations of the construct must be understood.

Employee engagement will be examined based on the seminal work of Kahn (1990). Kahn's (1990) work focused on psychological presence during particular moments of role performance. Kahn (1990) offered that individuals could include varying degrees of themselves, physically, cognitively, and emotionally, while maintaining "the integrity of the boundaries between who they are and the roles they occupy" (p. 692). The "more people draw on their selves to perform their roles within those boundaries, the more stirring are the performances and the more content they are with the fit of the costumes they don" (Kahn, 1990, p. 692). Kahn (1990) defined the physical, cognitive, and emotional input from themselves as personal engagement. Kahn (1990) defined personal engagement as "the harnessing of organization members' selves to their work roles" (p. 694). Kahn (1990) also described personal engagement as "the simultaneous employment and expression of a person's preferred self in task behaviors

that promote connections to work and to others, personal presence (physical, cognitive, and emotional), and active, full role performances” (p. 700).

Kahn’s (1990) seminal work regarding personal engagement was grounded using organizational behavior concepts such as person-role relationships, organizational commitment, and job involvement. Kahn (1990) utilized the original work of Lawler and Hall (1970) and Mowday, Porter and Steers (1982), and further investigated “how psychological experiences of work and work contexts shape the process of people presenting and absenting their selves during task performance” (p. 694).

Three psychological states of being emerged from Kahn’s (1990) work: meaningfulness; safety; and availability. According to Kahn (1990), these three conditions, in concert, shape how people inhabit their roles. Organization members subconsciously ask themselves three questions in each situation that subsequently guides their decisions whether to engage or disengage (Kahn, 1990). The three questions include (1) How meaningful is it for me to bring myself into this performance? (2) How safe is it to do so?, and (3) How available am I to do so? (Kahn, 1990). Kahn (1990) describes the three conditions as the logic of actual contracts. Kahn (1990) argues that individuals agree to “contracts containing clear and desired benefits and protective guarantees when they believe themselves to possess the resources necessary to fulfill the obligations generated” (p. 703). Individuals vary their level of personal engagement depending on the perceived benefits or meaningfulness, the guarantees or safety, and the perceived resources they have available (Kahn, 1990). Psychological meaningfulness is associated with work elements that create either incentives or disincentives for individuals to engage (Kahn, 1990). Psychological safety is associated with elements of

social systems that either provide “more or less nonthreatening, predictable, and consistent social situations in which to engage” (Kahn, 1990, p. 703). Lastly, psychological availability is associated “with individual distractions that preoccupy people to various degrees and leave them more or fewer resources with which to engage in role performance” (Kahn, 1990, p. 703).

Psychological meaningfulness is described as a “feeling that one is receiving a return on investments of one’s self in a currency of physical, cognitive, or emotional energy” (Kahn, 1990, p. 703). Kahn (1990) offered that individuals experienced meaningfulness when they felt worthwhile, useful and valuable. The lack of meaningfulness is described as individuals feeling that little was asked of them or expected “and that there was little room for them to give or receive in work role performances” (Kahn, 1990, p. 704).

Kahn (1990) describes psychological safety as an individual “feeling able to show and employ one’s self without fear or negative consequences to self-image, status or career” (p. 708). Kahn’s (1990) work revealed that individuals felt safe in situations when “they trusted that they would not suffer for their personal engagement” (p. 708). Further, Kahn’s (1990) research indicated that individuals felt safe when situations that promoted trust were predictable, consistent, clear, and nonthreatening. The opposite was also found to be true. When situations were unpredictable, inconsistent, unclear, or threatening, personal engagement was considered to be too risky or unsafe (Kahn, 1990).

Kahn (1990) describes psychological availability as an individual’s “sense of having the physical, emotional or psychological resources to personally engage at a particular moment” (p. 714). Psychological availability measures an individual’s

readiness for engagement, “given the distractions they experience as members of social systems” (Kahn, 1990, p. 714). Kahn’s (1990) research revealed that individuals were more or less available to place themselves “fully into role performance depending on how they coped with the various demands of both work and non-work aspects of their lives” (p. 714).

Kahn’s (1990) seminal work revealed that individuals offer varying degrees of themselves physically, cognitively, and emotionally, thus creating implications for their work and experiences. Rich et al. (2010) added to Kahn’s (1990) work by conceptualizing engagement as “the investment of an individual’s complete self into a role” and identified the effects of engagement antecedents on job performance (Rich et al., 2010, p. 617). Rich et al.’s (2010) research identified the three “explanatory concepts that often emphasize relatively narrow aspects of employees’ selves:” job involvement; job satisfaction; and intrinsic motivation (p. 618). Rich et al. (2010) argued that these three concepts alone, do not provide a comprehensive explanation for job performance, but rather suggest that Kahn’s (1990) approach to understanding engagement involving the manifestation of cognitive, emotional, and physical energy is a more comprehensive explanation for job performance.

Rich et al. (2010) further compartmentalize Kahn’s (1990) three psychological conditions for engagement into focal antecedents from each category. Rich et al. (2010) offer that “perceptions of organizational and work factors related to tasks and roles are the primary influences on psychological meaningfulness; perceptions of social systems related to support and relationships are the primary influences on psychological safety; and self-perceptions of confidence and self-consciousness are the primary influences on

psychological availability” (p. 620). Rich et al. (2010) described the three focal antecedents to job engagement as value congruence, perceived organizational support and core self-evaluations. Value congruence is evident when employees find that their roles call for behaviors that are consistent with how they see themselves, and are therefore, more likely to find their roles to be valuable, worthwhile and inviting (Kahn, 1992). Others such as Chatman (1989) and Kristof (1996) also suggest that when employees find that their preferred self-images are congruent with organizational role expectations, they find more meaningfulness in their work and, consequently, are more engaged.

According to Edmondson (1999), employees who perceive high organizational support do not fear repercussions from the organization if mistakes are made when they are fully investing themselves in their work roles. Further, Edmondson (1999) offers that employees do not fear damaging consequences to their roles, images or careers if they have positive expectations of how their organization will respond to their contributions or mistakes. Core self-evaluation is described as an individual’s assessment of their own worthiness, competence, effectiveness and capabilities (Judge, Bono, Erez, & Locke, 2005; Judge, Lock, & Durham, 1997). Judge and Hurst (2007) suggest that individuals with high core self-evaluations assess demands more positively, are able to cope with these demands more effectively and therefore, are able to invest more of themselves in their performance and work roles.

Kahn (1992) explains that employee engagement is intrinsically motivational. Psychological presence subsumes work motivation, and thus, the more fully engaged individuals are at work, the more meaning they experience during task performance. Individuals who excel at their work are more attentive and put more into their task

performance if they are psychologically present (Kahn, 1992). Law, Wong, and Mobley (1998) support the notion that employee engagement is a motivational construct. Law et al. (1998) describe employee engagement as a multidimensional motivational construct that is an amalgamation of the latent forms of engagement: an individual's physical; cognitive; and emotional energy that is at work during full work performance. Kanfer (1990) offers that the engagement concept, as described by Kahn, is motivational because it not only addresses the allocation of personal resources to work performance, but it also discusses the level of intensity and persistence that is applied from those resources.

Employee engagement is an important factor to consider when discussing the uniqueness of the shared services environment and the unique context of higher education in which this study is being performed. Accenture (2010) higher education consultants propose that “getting talent management right provides a competitive advantage for shared services operations and supports an improved experience for employees, while contributing to their enterprises’ overall strategic objectives” (p. 10). “Getting it right enables organizations to help navigate unstable financial environments and be better positioned for future success” (Accenture, 2010, p. 10). According to Accenture (2010), “actively engaging employees increases their satisfaction and, in turn, performance” (p. 4). Continually giving the employee an opportunity to enhance his or her skills and develop expertise affords the individual a better workplace experience and may reduce attrition (Accenture, 2010).

King (1998) explains that in order for a shared services environment to become successful, it is critical to focus on the employees of the unit. Engaging the employee at every opportunity will aid the unit in functioning more efficiently (King, 1998).

Involving the employee in the set-up and creation of a shared services unit to including them in the everyday mundane operations of the unit creates a feeling of inclusion (King, 1998). King (1998) also suggests that allowing employees to work as a team on projects, gaining exposure to new processes, training, and attending conference and industry events further builds high-performing shared services units.

Summary of the Chapter

This chapter has provided a theoretical and conceptual framework upon which this study will be built. The current state of higher education was discussed in order to provide some perspective on the environment in which higher education currently functions, the many obstacles that face the day-to-day-operations of higher education institutions and the impetus for organizational change within those institutions. Specifically, *enrollment management* was discussed and an explanation given as to its role in higher education and the recent push to implement shared services centers in support of enrollment management efforts. Foundational literature is provided concerning the shared services phenomenon and the increased frequency by which it is being implemented in enrollment management divisions. The chapter goes on to provide supportive literature in the areas of organizational performance and change, resource dependency theory and institutional theory. This examination revealed a significant gap in the literature regarding the implementation of shared services organizational structures in the context of higher education enrollment management divisions. The Burke-Litwin Model of Performance and Change and four of its organizational factors (management practices, structure, task requirements and individual skills/abilities and motivation) were examined and will be used in order to address the gap in the literature and provide

practical applications for higher education institutions. The construct of employee engagement was also examined to better understand the role it may play within the Burke-Litwin Model of OPC, and specifically, how it may function as a moderator of relationships between transactional constructs within the model.

Chapter Three

Methodology

This chapter will discuss the research methodology used in this study. As previously discussed in Chapter One, higher education enrollment management divisions are implementing shared services units at an increasing rate. The external environment seems to be playing a significant role in this organizational restructuring as well as potential mimetic activities; all with no substantial theoretical foundation or empirical research to support this specific structural change. A surplus of opinion-based reports, editorials, and white papers support the necessity of the shared services unit in higher education enrollment management divisions (Deloitte & Touche, 2011; Glenn, 2009; Johal, 2013; Management Consulting Partners, n.d; Metnick et al., 2012; Stony Brook University Senate Administrative Review Committee, 2012). Unfortunately, no academic literature or empirical data from the human resource development or organizational development fields is available. Therefore, little is known with regard to the impact of this relatively new phenomenon on organizational change dimensions. Furthermore, no research investigates the impact on individual motivation in the context of higher education enrollment management.

The purpose of the study is to examine shared services models that have been implemented in the context of enrollment management divisions in higher education institutions. This study examined specific transactional constructs of the Burke-Litwin Model of Organizational Performance and Change (OPC) (e.g., management practices, structure, task requirements and individual skills/abilities, and motivation) as well as the moderating role employee engagement may play in impacting relationships among these constructs within the causal model.

The research questions investigated are as follows:

1. Is there a direct relationship between the following transactional constructs of the Burke-Litwin Model of Organizational Performance and Change: structure and motivation; structure and management practices; structure and task requirements and individual skills/abilities; management practices and task requirements and individual skills/abilities; management practices and motivation; task requirements and individual skills/abilities and motivation?
2. Does employee engagement moderate the relationships between structure, management practices, task requirements and individual skills/abilities and motivation?

The research hypotheses are as follows:

H₁: Employees perceive that structure positively influences their motivation.

H₂: Employees perceive that structure positively influences management practices.

H₃: Employees perceive that structure positively influences task requirements and individual skills/abilities.

H₄: Employees perceive that management practices positively influences task requirements and individual skills/abilities.

H₅: Employees perceive that management practices positively influences their motivation.

H₆: Employees perceive that task requirements and individual skills/abilities positively influence their motivation.

Based on the research hypotheses, Figure 5 depicts the conceptual hypothesized model.

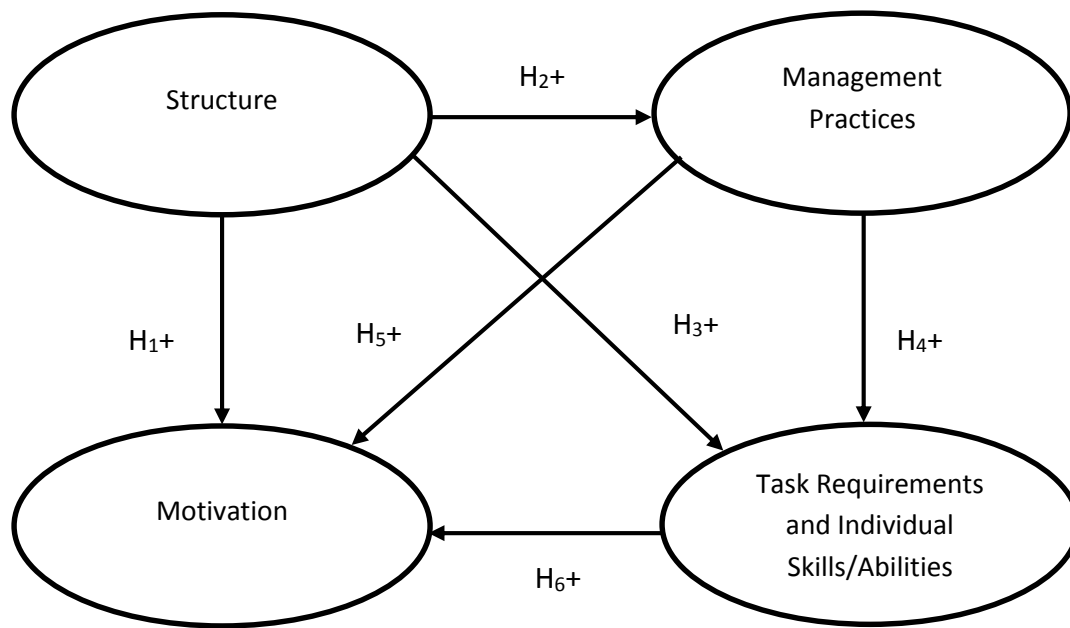


Figure 5. Hypothesized Model

The positive relationships indicated in these hypotheses are grounded in the literature surrounding management practices, structure, task requirements and individual skills/abilities, motivation, and employee engagement (Boyatzis, 1982; Duncan, 1979; Edwards, 1991; Edwards, 1996; Evans, 1986; Galbraith, 1974; Kahn, 1990; Kahn, 1992; Kotter, 1982; Kristof, 1996; Kristof-Brown et al., 2005; Luthans, 1988; Locke et al., 1981; Mitzberg, 1973; Rich et al., 2010; Vroom, 1964; Weiner, 1972; Weiner, 1985).

Design of the Study

In order to answer the research questions, this study utilized a cross-sectional, survey-based, quantitative design (Bryman & Bell, 2011). The cross-sectional design approach was used, as the study collected data regarding two or more variables on more than one case at a single point in time (Bryman & Bell, 2011). A quantitative research approach was chosen for this study based on the three tenants of the strategy that include “a deductive approach to the relationship between theory and research, in which the accent is placed on the testing of theories,” the incorporation of “the practices and norms

of the natural scientific model, and of positivism in particular,” and the embodiment of “social reality as an external, objective reality” (Bryman & Bell, 2011, p. 27).

Population/Sample

The sample of participants was chosen through nonprobability convenience sampling (Bryman & Bell, 2011). The sampling frame included 121, four-year, public universities from across the United States. Each public university operates a shared services unit on its campus and offers a combination of services such as admissions, registration, advising, financial aid, student cashiering services, veteran’s services, and student housing services. The universities have student populations ranging from approximately 1,000 to 76,000. Convenience sampling was used as the researcher has professional working relationships with colleagues at other higher education institutional campuses that currently operate a shared services concept in their enrollment management divisions. The sample consisted of employees (entry level and managers) that currently work in shared services units in enrollment management divisions in higher education institutions. This sample was identified by way of the manager, director, or administrator of the shared services unit sending the online survey link to the potential respondents within his or her unit.

It is important to note that the sample size sought for this study was a minimum of 200. According to Hoelter (1983), a sample size of 200 or greater is considered to be adequate to perform structural equation modeling, as the sample size influences the calculation of the minimum fit function chi square and the root-mean-square error of approximation (RMSEA). Schumacker et al. (2010) also support a sample size upwards of 200, citing that a relatively large sample size is required “to maintain power and obtain stable parameter estimates and standard errors” (p. 41). Schumacker et al. (2010) point

out that a large sample size is necessary when using multiple observed variables to define latent variables.

Instrumentation

According to Armenakis, Mossholder, and Harris (1990), change practitioners attempting to assess an organization often use questionnaires to collect and analyze critical information about the organization in order to design appropriate organizational interventions. Babbie (2004) offers that survey questionnaires are a useful approach for collecting self-reported data and continue to be the leading method of measuring respondents' attitudes. Both the Burke-Litwin Organizational Assessment Survey (OAS) (W. Warner Burke Associates, Inc., n.d.) and the Rich Job Engagement Scale (Rich et al., 2010) were used in this study.

The Burke-Litwin Organizational Assessment Survey (OAS) (W. Warner Burke Associates, Inc., n.d.) is one of the instruments utilized to collect data. A formal written request was sent to the owner of the survey instrument, Dr. Warner Burke, the Edward Lee Thorndike Professor of Psychology and Education at Columbia University. The request was approved by Dr. Warner Burke, who sent a copy of the survey for use in this study (Appendix A). The Burke-Litwin OAS is designed to measure individuals' perceptions of the overall conditions within the organization (Vitale, Armenakis, & Field, 2008; W. Warner Burke Associates, Inc., n.d.). The Burke-Litwin OAS consists of 90 items, based on a 5-point Likert-type rating scale, and assesses 12 organizational dimensions (Stone, 2010). The instrument also includes nine demographic questions, 16 open-ended questions associated with the constructs, and three general comment questions. The 12 organizational dimensions include external environment, mission and strategy, leadership, organization culture, structure, management practices, systems

(policies and procedures), work unit climate, task requirements and individual skills/abilities, motivation, individual needs and values, and performance (Burke & Litwin, 1992).

For the purpose of this study, the Burke-Litwin OAS was modified and administered in order to acquire data regarding only seven constructs (e.g., leadership, mission and strategy, management practices, structure, work unit climate, task requirements and individual skills/abilities and motivation) (Appendix B). The focus of this study was centered on four specific constructs: management practices; structure; task requirements and individual skills/abilities; and motivation. Supportive literature is included that discusses and examines these constructs. Ten demographic questions were placed at the end of the questionnaire in order to ascertain information such as age, gender, number of years on the job, and position within the shared services unit. The instrument consisted of 51 items representing seven constructs. Each construct had the following number of questions: 7 – leadership; 11 – mission and strategy; 13- management practices; 4 – structure; 8 – work unit climate; 4 – task requirements and individual skills/abilities; and 4 - motivation. The survey was delivered using Qualtrics (2013) online data collection software. Each item was adjusted to include a Likert-type scale with possible response options ranging from 1 to 7. The scale adjustment will aid in mitigating lack of variance among responses (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

For the purpose of measuring employee engagement, the Rich Job Engagement Scale (Rich et al., 2010) was also used. The Rich Job Engagement Scale exists in the public domain, therefore, no written consent was required. The Rich Scale was

developed based on the seminal work of Kahn (1990) and was used to measure physical, emotional, and cognitive engagement (job engagement) as part of a single instrument (Rich et al., 2010). The survey includes 18 items, with the first six items devoted to measuring physical engagement, the next six measuring emotional engagement, and the last six measuring cognitive engagement (Rich et al., 2010). The original survey includes a five-point Likert scale that ranges from “strongly disagree” (1) to “strongly agree” (5) (Rich et al., 2010). The instrument was adjusted to include a seven-point Likert scale. Rich et al. (2010) fashioned the first six questions regarding physical engagement from Brown and Leigh’s (1996) scale of work intensity. However, Rich et al. (2010) believed the items were worded in a manner that limited the full scope of the questions. Therefore, the items were reworded in order to maintain consistency with Kahn’s (1990) original meaning of engagement (Rich et al., 2010). Six questions regarding emotional engagement were developed from Russell and Barrett’s (1999) work on core effect, which is defined as a generalized emotional state consisting of pleasantness and a sense of energy. These six questions also “refer to the feelings associated with a particular target,” which in the case of this research, is the respondent’s work role (Rich, et al., 2010, p. 623). The last six questions measure cognitive engagement and were derived from Rothbard’s (2001) measurement of engagement, “which includes both attention (level or amount of focus and concentration) and absorption (level of engrossment of the intensity of the focus and concentration)” (Rich et al., 2010, p. 623).

Data Collection Approaches/Procedures

Prior to collecting data, formal approval was requested from The University of Texas at Tyler's Institutional Review Board (IRB). The University of Texas at Tyler's IRB approved the research and data collection, ensuring that human subjects in this study would be protected (Appendix C). The data was collected utilizing a modified version of the Burke-Litwin Organizational Assessment Survey and the Rich Job Engagement Scale and was named the Organizational Assessment Survey.

The Organizational Assessment Survey was delivered using Qualtrics (2013) online data collection software. The survey was emailed to administrators of shared services centers at each of the 121 public institutions with a request to forward the survey to the employees within their unit and to allow the employees to complete the survey during normal working hours. An anonymous survey link was used in order to protect the respondents' identity.

The administrators of the shared services units had job titles consisting of vice-president, director or coordinator. All survey respondents were employed in a shared services unit at his or her respective campus. Job duties of the respondents included providing front-line student services, counseling with students, processing paperwork and overseeing shared services staff. The Organizational Assessment Survey consisted of 79 questions and took approximately ten minutes to complete. At the outset of the questionnaire, informed consent was requested. Respondents were informed of their right to opt out of the survey at any time with no penalty to them. Respondents were made aware that their responses will be kept confidential. Respondents had the opportunity to begin the survey and save their responses, with an option to come back

later and complete the survey. Respondents were given two weeks to complete the survey. A reminder email was sent to the administrator of the shared services unit at each of the 121 institutions.

Data Analytic Techniques

Initially, data was analyzed using the Statistical Package for the Social Sciences (SPSS). Results were reviewed to ensure no data was missing and that no erroneous data was skewing outcomes. Descriptive statistics were run to examine and organize the characteristics of the data set, including respondent demographics (Salkind, 2011). An independent sample *t* test was run comparing early responders to the Organizational Assessment Survey to late responders (Salkind, 2010). The independent sample *t* test revealed that there was no statistically significant difference between the two groups (Salkind, 2010). Reliability of the Burke-Litwin OAS and the Rich Scale was performed to ensure that the scales were measuring consistently (Table 1) (Salkind, 2010). A Harman's one-factor test was also run to examine the potential for common method variance (Podsakoff et al., 2003).

The results of the study were analyzed using confirmatory factor analysis (CFA) and structural equation modeling (SEM) in order to confirm the structural associations and strength of relationships among the variables management practices, structure, task requirements and individual skills/abilities, motivation, and employee engagement (Schumacker & Lomax, 2010; Swanson & Holton, 2005). CFA and SEM were demonstrated using Analysis of Moment Structures (AMOS) software. Confirmatory factor analysis was used specifically to determine if the latent variables within the

measurement models are true indicators of the constructs they are measuring (Schumacker & Lomax, 2010).

In the case of the Burke-Litwin Model OAS, the survey items were tested to determine if, indeed, they define the specified constructs (management practices, structure, task requirements and individual skills/abilities, and motivation) of the Burke-Litwin (1992) Model of OPC that are being analyzed. CFA was performed on the latent variables of the Rich Job Engagement Scale to determine whether they define job engagement (physical engagement, emotional engagement, cognitive engagement). Structural equation modeling was also utilized to test the moderating effect of employee engagement on the relationship between the transactional constructs within the Burke-Litwin Model of OPC.

Structural equation modeling was the most appropriate data analysis method to use in the case of this research. Structural equation modeling “uses various types of models to depict relationships among observed variables, with the same basic goal of providing a quantitative test of a theoretical model hypothesized by the researcher” (Schumacker & Lomax, 2010, p. 2). SEM also allows for various theoretical models to be tested that hypothesize “how sets of variables define constructs and how these constructs are related to each other” (Schumacker & Lomax, 2010, p. 2). There are a number of reasons SEM is a valuable data analysis tool for this study. SEM will allow for the inclusion of a large number of variables that can test complex phenomena (Schumacker & Lomax, 2010). SEM will take into account measurement error while at the same time provide statistical analysis of the data (Schumacker & Lomax, 2010).

SEM will also reveal that sets of variables that define certain constructs are related in a certain way (Schumacker & Lomax, 2010).

Reliability and Validity

As of 2012, no official manual accompanied the Burke-Litwin OAS (Stone, 2012). Stone's (2012) research provided evidence supporting the theoretical framework of the Burke-Litwin (1992) Model of OPC. Research results indicated strong content validity, strong support for its structure, and good internal consistency of all twelve factors, except for external environment (Stone, 2012). Stone's (2012) research addressed the issues of reliability and validity and serves as an informal manual for the Burke-Litwin OAS. The Rich Job Engagement Scale also has no official manual but validity and reliability are supported by the research of Rich et al., (2010).

Reliability. According to Bryman and Bell (2011), reliability is concerned with whether the measures devised for concepts are consistent. Similarly, Salkind (2011) offers that reliability is simply whether a measurement tool measures something consistently. Issues associated with reliability will be addressed and supported by utilizing previous academic studies that have applied the Burke-Litwin OPC Model and utilized the Burke-Litwin OAS as the measurement instrument (Anderson-Rudolf, 1996; Di Pofi, 2002; Falletta, 1999; Fox, 1990; Stone, 2010, 2012). Stone's (2012) research (Table 1) indicates the Cronbach's alpha scores of the twelve constructs of the Burke-Litwin Model of OPC. Eleven of the twelve factors indicate strong reliability except for *external environment*, which indicates low internal consistency ($\alpha = .55$) (Stone, 2012). The Rich Job Engagement Scale was first utilized to study 245 full-time firefighters and their supervisors from four different municipalities (Rich et al., 2010). This study

revealed strong internal consistency with a Cronbach's alpha score of ($\alpha = .95$) (Rich et al., 2010).

Table 1. Internal Consistency of the Burke-Litwin OAS Constructs

Survey Construct	Items	Cronbach's α					Average n/a
		Fox (1990)	Anderson-Rudolf (1996)	Falletta (1999)	Di Pofi (2002)	Stone (2010)	
		n = 260	4,644/10,078	268	188	256	
External Environment	1-4	n/a	n/a	0.590	0.580	0.550	0.570
Mission & Strategy	1-4	n/a	n/a	0.860	0.880	0.900	0.880
Leadership	16-22	0.970	0.840/0.830	0.900	0.930	0.930	0.900
Culture	23-34	0.950	0.830/0.780	0.850	0.880	0.890	0.860
Structure	35-38	n/a	n/a	0.680	0.740	0.720	0.710
Management Practices	39-51	0.920	0.970/0.980	0.930	0.940	0.940	0.950
Systems	52-59	n/a	n/a	0.840	0.860	0.850	0.850
Work Unit Climate	60-67	0.850	0.860/0.810	0.880	0.910	0.910	0.870
Task Requirements/ Individual Skills	68-71	n/a	n/a	0.880	0.760	0.690	0.780
Motivation	72-75	n/a	n/a	0.810	0.900	0.890	0.870
Individual Needs & Values	76-80	n/a	n/a	0.760	0.710	0.760	0.740
Performance	81-90	0.840	0.830/0.840	0.870	0.900	0.870	0.860

(Stone, 2012, p. 17)

According to Rich et al. (2010) the internal consistency of the scale was confirmed for each of the engagement dimensions (physical engagement, emotional engagement, cognitive engagement) with an average Cronbach's alpha scores ranging from .89 to .94 (Rich et al., 2010).

Validity. Babbie (1999) describes validity as “the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration” (p.113). In the case of the construct validity of the Burke-Litwin OAS, the instrument does indeed measure the constructs of the Burke-Litwin Model of OPC (Stone, 2012). According to Falletta (1996) all variables in the survey are significantly correlated as hypothesized by Burke and Litwin (1992). Bryman and Bell (2011) offer that internal validity speaks to the issue of causality. Internal validity relates to whether a conclusion that incorporates a causal relationship between two or more variables is accurate (Bryman & Bell, 2011). In this study, issues of internal validity of the Burke-Litwin Model of OPC will be addressed based on the causal relationships previously established by other scholars such as Fox (1990) and Anderson-Rudolf (1996). Fox (1990) tested an early version of the Burke-Litwin Model of OPC using factor analysis. Results from the study revealed directional causality “among organizational culture to leadership, management practices, work unit climate and individual and organizational performance” (Stone, 2010, p. 56). A later longitudinal study by Anderson-Rudolf (1996) expanded on Fox’s (1990) research by utilizing principle component analysis to evaluate the Burke-Litwin Model of OPC. The first study revealed 13 factors and the second study revealed 12 factors (Anderson-Rudolf, 1996). These 12 factors are the ones used in the current Burke-Litwin Model of OPC (Stone, 2010).

In studies by Falletta (1999) and Di Pofi (2002), validity measures were not indicated. Stone’s (2012) research of the Burke-Litwin OAS provided a summary of the instrument validity measures that exist throughout the literature. Table 2 demonstrates the standard assessment measures, as suggested by the American Educational Research

Association, American Psychological Association, & National Council on Measurement in Education (1999) and supported by Gliner, Morgan, and Leech (2009).

Table 2. Burke-Litwin OAS Measurement Validity

Standard	Definition	Evidence
Evidence based on content	All aspects of the construct are represented in appropriate proportions.	Yes. The strongest evidence of link between OP&C model and OAS are found in: (Burke, 2008, 2011; Burke & Litwin, 1992)
Evidence based on response processes	The extent to which the types of participants responses match the intended construct	Some...the only evidence for the OAS found was (Di Pofi, 2002; Falletta, 1999). However, discussion around a 'survey' and 'benefits' are present but cannot verify if OAS was used (Bernstein & Burke, 1989; Burke, Coruzi, & Church, 1996; Burke & Jackson, 1991; Fox, 1990)
Evidence based on structure	Factorial: Factorial analysis yields a theoretically meaningful solution.	Yes...evidence found for OAS in (Anderson-Rudolf, 1996; Fox, 1990; Stone, 2010)
Evidence based on relations to other variables	<i>Predictive-Criterion Evidence</i> : The test predicts some criterion in the future. <i>Concurrent-Criterion Evidence</i> : Test and criterion are measured at the same time. <i>Convergent</i> : Based on theory, variables predicted to be related are related. <i>Discriminant</i> : Variables predicted not to be related are not related. <i>Validity generalization</i> : Produces generalizability.	Some. If one assumes the OAS is representative of the OP&C model, the predictive, convergent and generalizability are high (Anderson-Rudolf, 1996; Burke & Litwin, 1992; Falletta, 1999; Pratt, 2004; Stone, 2010)
Evidence based on consequences	Anticipated and unanticipated consequences of measurement	None. The instrumentation manual could improve this

(Stone, 2012, p. 10-11)

Internal validity of the Rich Job Engagement Scale was confirmed in Rich et al.'s (2010) research using confirmatory factor analysis. Table 3 addresses the job engagement items and factor loadings (Rich et al., 2010). All factor loadings were significant with ($p = <.001$) (Rich et al., 2010).

Table 3. Job Engagement Items and Factor Loadings^a

Items	Firefighters ^b
<i>Physical engagement</i>	
I work with intensity on my job	0.71
I exert my full effort to my job	0.86
I devote a lot of energy to my job	0.77
I try my hardest to perform well on my job	0.84
I strive as hard as I can to complete my job	0.79
I exert a lot of energy on my job	0.67
<i>Emotional engagement</i>	
I am enthusiastic in my job	0.87
I feel energetic at my job	0.90
I am interested in my job	0.82
I am proud of my job	0.68
I feel positive about my job	0.87
I am excited about my job	0.91
<i>Cognitive engagement</i>	
At work, my mind is focused on my job	0.80
At work, I pay a lot of attention to my job	0.87
At work, I focus a great deal of attention on my job	0.91
At work, I am absorbed by my job	0.92
At work, I concentrate on my job	0.67
At work, I devote a lot of attention to my job	0.88

^aAll factor loadings are significant at $p < .001$

^b $n = 245$

(Rich et al., 2010)

Bryman and Bell (2011) describe external validity as the ability to generalize the results of a study beyond that of the research context. This study will utilize nonprobability convenience sampling, therefore, it will not be generalizable to other fields or contexts (Bryman & Bell, 2011). However, the data generated will serve as a catalyst for future research regarding the implementation of the shared services concept in the context of higher education enrollment management divisions. This research will also provide linkages to research regarding shared services in other fields.

Limitations

The following are limitations of this study:

1. Response rate may be affected by the length of the organizational assessment survey. The survey included 51 questions taken from the Burke-Litwin Organizational Assessment Survey (W. Warner Burke Associates, Inc. n.d.), 18 questions taken from the Rich Engagement Scale (Rich et al., 2010), and ten demographic questions.
2. A cross sectional, survey-based, quantitative research design was utilized for this research. The use of this design, and not a qualitative design, limited the ability to ask open ended questions and determine why individuals feel the way they do.
3. Nonprobability sampling was utilized for this study. In this case, the external validity was negatively impacted, therefore, results are not generalizable.
4. The research will take place in 4-year, public, higher education institutions. In that case, the results may not be useful to other schools or institutions such as 2-year upper level universities, private colleges, community colleges, or technical/vocational schools.
5. Self-report bias (common rater effect) may contribute to common method variance. The respondent to the online survey was the same individual that provided the measure for both the predictor and criterion variable (Podsakoff et al., 2003).

Summary of the Chapter

This chapter details the methodological approach to the proposed research. The chapter describes the design of the study in detail, along with a description of the population/sampling techniques. Instrumentation is explained and details of the

measurement technique are included. Data collection approaches and procedures, data analysis, reliability, validity, and limitations of the study are also prescribed and explained in depth.

Chapter Four

Data Analysis Results

This chapter discusses results from the data collected and provides an analysis of the findings. The chapter includes descriptive statistics, results from an independent sample t-test, an analysis of the reliability of the survey instruments, results from the principal component analysis, confirmatory factor analysis results, an analysis of the data using structural equation modeling, an analysis of the research questions with associated hypotheses, a post-hoc analysis, and a summary of the findings.

The purpose of the study was to examine shared services models that have been implemented in the context of enrollment management divisions in higher education institutions. This study will examine specific transactional constructs of the Burke-Litwin Model of Organizational Performance and Change (OPC) (e.g., management practices, structure, task requirements and individual skills/abilities, and motivation) as well as the moderating role employee engagement plays in impacting relationships among these constructs within the causal model.

Descriptive Statistics

The sample of participants for this study were chosen through nonprobability convenience sampling (Bryman & Bell, 2011). A total of 121, four-year, public universities from across the United States were recruited as part of the sampling frame for this study. Each public university operated a shared services unit on its campus. Each public university had an average of 12 employees working in their shared services unit in the enrollment management division. Approximately 1,452 employees of shared services

units were recruited for this study. The 121 institutions recruited ranged in student population from approximately 1,000 to 76,000.

Of the 121 institutions recruited, 66 % (80) were available to participate in the survey, representing approximately 958 employees. Of the approximately 958 employees, 437 agreed to participate in the survey, resulting in a 46% response rate. Of the 437 respondents, 218 were eliminated due to missing data. The remaining 219 employees fully completed the survey representing the final sample population. Missing data was addressed through listwise deletion (Byrne, 2010). Listwise deletion allowed for the exclusion of any cases that had missing data for any of the variables, thus, resulting in a sample that only included complete responses (Byrne, 2010). The 219 complete responses received were an optimal sample size in order to apply analysis using structural equation modeling (Schumacker et al., 2010).

Table 4 provides demographic information for the 219 respondents. Of the 219 employees that completed the survey, 74.5% were female and 25.5% were male. Age of the respondents ranged from 18 to 69. Respondents ranging in age from 18 to 33 accounted for 27.4%, 45.7% ranged in age from 34-49, 26.4% from 50-68 and .5% indicated they were 69 years of age or older. The average age of the respondents was 44. The highest level of education obtained by each respondent ranged from high school only to advanced degrees such as Ph.D., Ed.D., J.D., or M.D. Respondents indicating their level of education as high school only resulted in 4%, 4% technical school only, 37% received a bachelor's degree or equivalent, 45% received a master's degree and 10% had received an advanced degree such as Ph.D., Ed.D., J.D., or M.D.

Respondents were asked about their position within the organization in terms of level (entry level/front-line, middle management, manager/director, senior administrator – assistant vice president, vice president, vice chancellor). Respondents indicating that they were entry level or front line staff resulted in 32.2%. Respondents indicating that they were a part of middle management account for 27.4%, 29.8% were managers/directors, and 10.6% indicated they were senior administrators.

Income level for each respondent ranged from less than \$25,000 to \$150,000 or more. Those respondents indicating income of less than \$25,000 resulted in 6.7%. Those with income levels ranging from \$25,000 to \$34,999 resulted in 14.4%, \$35,000 to \$49,999 was 29.8%, \$50,000 to \$74,999 was 20.7%, \$75,000 to \$99,999 was 12%, \$100,000 to \$149,999 was 11.1%, and \$150,000 or more was 5.3%.

The size of each organization ranged from less than 1000 full-time students to more than 10,000 full-time students. Respondents indicating their institution's student population was less than 1000 resulted in 2.4%. Those indicating a range of 1000 to 3000 full-time students accounted for 16.4%. The range of 3,001 to 10,000 accounted for 34.1% and 47.1% indicated their full-time student population was greater than 10,001. The size classification was modeled after the Carnegie Classification system (The Carnegie Classification of Institutions of Higher Education, 2015). This system describes institutional diversity of U.S. higher education institutions and has been widely used in research and policy analysis over the last four decades (The Carnegie Classification of Institutions of Higher Education, 2015).

Respondents were asked to indicate the number of years they had worked in higher education. Respondents indicating 1 to 5 years resulted in 25.5%. Those

indicating a range of 6 to 10 years accounted for 17.8% while the range of 11 to 15 years accounted for 25%. Respondents noting a range of 16 to 20 years included 12.5% and those indicating 21 years or more accounted for 19.2%.

Respondents were asked how long their unit (shared services) had been in place. The ranges included less than 1 year, 1 to 3 years, 4 to 6 years and 7 or more years. Respondents indicating that their unit had been in operation for less than one year resulted in 5.8%. Those indicating a range of 1 to 3 years accounted for 17.3% while the range of 4 to 6 years included 19.2%. Respondents indicating their unit had been in operation for 7 years or more accounted for 57.7%.

Respondents were also asked how many years they have worked within their current unit or department. The ranges included less than 1 year, 1 to 3 years, 4 to 6 years and 7 or more years. Respondents indicating that they had worked within their current unit or department for less than one year resulted in 14.9%. Those indicating a range of 1 to 3 years accounted for 35.6% while the range of 4 to 6 years included 20.7%. Respondents indicating they had worked within their unit for 7 years or more accounted for 28.8%.

Respondents were asked how many employees work within their unit or department. The ranges included 10 or less, 11 to 20, 21 to 30, and 31 or more. Respondents indicating that there were less than 10 employees in their unit resulted in 28.4%. Those indicating a range of 11 to 20 accounted for 27.9% while the range of 21 to 30 included 14.4%. Respondents indicating 31 or more employees work within their unit accounted for 29.3%.

Table 4. Respondent Demographics

n = 219	
Factor	%
Gender	
<i>Male</i>	25.5%
<i>Female</i>	74.5%
Age	
<i>18-33</i>	27.4%
<i>34-49</i>	45.7%
<i>50-68</i>	26.4%
<i>69 ></i>	0.5%
Level of Education	
<i>High School</i>	4.0%
<i>Technical School</i>	4.0%
<i>Bachelor's or equivalent</i>	37.0%
<i>Master's Degree</i>	45.0%
<i>PhD, EdD, JD, MD</i>	10.0%
Organizational Level	
<i>Entry Level/Front Line Personnel</i>	32.2%
<i>Middle Management</i>	27.4%
<i>Manager/Director</i>	29.8%
<i>Senior Administrator</i>	10.6%
Income Level	
<i>Less than \$25,000</i>	6.7%
<i>\$25,000 to \$34,999</i>	14.4%
<i>\$35,000 to \$49,999</i>	29.8%
<i>\$50,000 to \$74,999</i>	20.7%
<i>\$75,000 to \$99,999</i>	12.0%
<i>\$100,000 to \$149,000</i>	11.1%
<i>\$150,000 or more</i>	5.3%
Size of Organization	
<i>< 1000 full-time students</i>	2.4%
<i>1000 - 3000 full-time students</i>	16.4%
<i>3001 - 10,000 full-time students</i>	34.1%
<i>10,001 > full-time students</i>	47.1%
Number of Years Working in High Education	
<i>1 - 5</i>	25.5%
<i>6 - 10</i>	17.8%
<i>11 - 15</i>	25.0%
<i>16 - 20</i>	12.5%
<i>21 ></i>	19.2%
Number of Years Unit in Place	
<i>Less than 1 year</i>	5.8%
<i>1 - 3</i>	17.3%
<i>4 - 6</i>	19.2%
<i>7 ></i>	57.7%
Number of Years You Have Worked in Your Unit/Department	
<i>Less than 1 year</i>	14.9%
<i>1 - 3</i>	35.6%
<i>4 - 6</i>	20.7%
<i>7 ></i>	28.8%
Number of Employees in Unit/Department	
<i>10 or less</i>	28.4%
<i>11 - 20</i>	27.9%
<i>21 - 30</i>	14.4%
<i>31 ></i>	29.3%

An independent samples *t*-test was performed to identify any significant differences between early responders of the survey and late responders (Cohen, Cohen, West, & Aiken, 2003). The purpose of the independent samples *t*-test was to determine if there was a difference in average scores of the variables between the two groups (Salkind, 2011). The following variables were tested; structure, management practices, task requirements and individual skills/abilities, motivation and employee engagement. The Levene's test scores for each of the variables, revealed that the two groups were the same and no statistically significant difference existed between them. *T* values ranged from $t=-1.247$ to 1.406 , $p = .092$ to $.995$.

Reliability

Reliability of the Burke-Litwin Organizational Assessment Survey and the Rich Engagement Scale were performed using SPSS. The reliability of scales measures the internal consistency of the survey instrument (Salkind, 2011). Reliability tests performed for the BLOAS for this study were consistent with previous studies by Anderson-Rudolf (1996), Di Pofi (2002), Falleta (1999), Fox (1990), and Stone (2010, 2012). Cronbach's alpha scores for the BLOAS scale ranged from .80 to .96. Scores indicated an acceptable measurement of reliability greater than .70 (George & Mallery, 2003).

The Cronbach's alpha score for the Rich Engagement Scale was .95 which exceeds the minimum threshold for reliability as indicated by George et al. (2003). This score was also consistent with previous studies by Rich et al. (2010). Table 5 provides Cronbach's alpha scores for both the BLOAS and Rich Scales.

Table 5. Internal Consistency of the Burke-Litwin Organizational Assessment Survey and the Rich Job Engagement Scale

		Cronbach's α						
		Fox (1990)	Anderson- Rudolf (1996)	Falletta (1999)	Di Pofi (2002)	Stone (2010)	Rich (2010)	Cooper (2015)
		<i>n</i> =	260	4,644/ 10,078	268	188	256	245
<i>Instrumen t</i> /Survey Construct	Number of Items							
<i>Burke-Litwin Organizational Assessment Survey</i>								
Structure	4	n/a	n/a	0.680	0.740	0.720		0.818
Management Practices	13	0.920	0.970/0.980	0.930	0.940	0.940		0.959
Task Requirements/ Individual Skills	4	n/a	n/a	0.880	0.760	0.690		0.802
Motivation	4	n/a	n/a	0.810	0.900	0.890		0.910
<i>Rich Job Engagement Scale</i>								
Employee Engagement	18						0.950	0.959

A principal component analysis was performed using dimension reduction to review the variance among the items of the BLOAS and Rich Scales. Eigenvalues were reviewed to determine how much of the variance was attributed to certain items within each scale. Six items with Eigenvalues greater than 1 accounted for 73.5% of the variance among the observed variables (Podsakoff et al., 2003). The Eigenvalue results indicated that influence in the data was not a result of common method variance (Podsakoff et al., 2003).

Confirmatory Factor Analysis

Initially, confirmatory factor analysis (CFA) was performed at the construct level to examine the latent variables and to obtain factor loadings of each scale item (Hair, Black, Babin, & Anderson, 2015). CFA is performed to examine “how, and the extent to which, the observed variables are linked to their underlying latent factors” (Byrne, 2010, p. 6). Factor loadings are of primary interest, as they explain the “extent to which the

observed variables are generated by the underlying latent constructs and the strength of the regression paths from the factors to the observed variables” (Byrne, 2010, p. 6). The path diagram was drawn for each construct (management practices, structure, task requirements and individual skills/abilities, employee engagement, motivation) and modification indices were reviewed to determine if high covariances existed for some items within a specific construct (Byrne, 2010). CFA results revealed the need to modify the model adding error covariances between some items within the following constructs: management practices, task requirements and individual skills/abilities; and employee engagement (Schumacker et al., 2010).

According to Hair et al. (2015), factor loading values should be greater than 0.7 and be statistically significant. The majority of factor loadings were greater than the minimum threshold of 0.7 as specified by Hair et al. (2015). Due to some factors loading below .5 and high multi-collinearity, the scales were trimmed for management practices and employee engagement, allowing for better measurement model fit (Yaun & Bentler, 1997). Item MP1 was trimmed from management practices. The following items were trimmed for employee engagement: EE1; EE2; EE3; EE4; EE5; EE6; EE7; EE8; EE9; EE11; EE12; and EE18. These item trimmings are reflected in Table 6. According to Yaun and Bentler (1997), parsimonious trimming of items does not fundamentally change the measurement or function of a construct.

The average variance extracted (AVE) was reviewed for each construct to determine adequate convergent validity (Hair et al., 2015). Average variance extracted is a “summary measure of convergence among a set of items representing a latent construct” (Hair et al., 2015, p 601). AVE also represents the “average percentage of

variation explained among the items of a construct” (Hair et al., 2015, p. 601). Composite reliabilities for each construct were also examined. Table 6 provides composite reliabilities and factor loadings for each construct. Composite reliabilities ranged from 0.803 to 0.988 demonstrating adequate internal consistency (Hair et al., 2015). Each factor had an average variance extracted (AVE) greater than 0.50, indicating acceptable convergent validity (Hair et al., 2015).

Table 6. Scale Items With Composite Reliability and Factor Loading

Scale	Survey adjusted scale items	Composite Reliability	Factor loading***
<i>Burke-Litwin Organizational Assessment Survey</i>			
Management Practices	To what extent does your manager inspire and motivate people?	0.988	0.886***
	To what extent does your manager recognize innovation?		0.876***
	To what extent does your manager demonstrate a commitment to safety?		0.746***
	To what extent does your manager demonstrate a concern for the customer?		0.722***
	To what extent does your manager engage in realistic budgeting?		0.749***
	To what extent does your manager encourage communication up, down and across?		0.891***
	To what extent does your manager demonstrate knowledge and expertise in his/her area of the business?		0.789***
Structure	To what extent does the organization's structure help different departments work together effectively?	0.836	0.898***
	Does the structure support the accomplishment of the organization's mission and strategy?		0.945***
	For managers in your organization, how would you characterize the breadth and depth of responsibilities they are expected to manage?		0.312***
<i>Task Requirements Individual Skills/Abilities</i>			
Skills/Abilities	How challenged do you feel in your present job?	0.803	0.703***
	To what extent do you believe your skills, knowledge, and experience appropriately fit the job you currently hold?		0.691***
	To what extent are the right people selected for promotion or assignment to projects in your organization?		0.782***
	Do employees feel they can request formal training and development?		0.665***
Motivation	How would you characterize employee morale?	0.901	0.749***
	To what extent do you feel encouraged to reach higher levels and standards of performance in your work?		0.837***
	To what extent do you feel your total motivational energies are being drawn on to support the organization's mission and purpose?		0.931***
	To what extent are other employees in your organization motivated to do what is needed to achieve the organization's mission and purpose?		0.808***
<i>Rich Job Engagement Scale</i>			
Employee Engagement	I am proud of my job	0.931	0.628***
	At work, my mind is focused on my job		0.812***
	At work, I pay a lot of attention to my job		0.953***
	At work, I focus a great deal of attention on my job		0.962***
	At work, I am absorbed by my job		0.750***
	At work, I concentrate on my job		0.859***

Note: ***<0.001

CFA was then performed to analyze the interaction among all of the constructs in the measurement model. CFA revealed that the measurement model was recursive, supporting previous empirical studies that the Burke-Litwin Model of OPC is a causal model (Anderson-Rudolf, 1996; Di Pofi, 2002; Falletta, 1999; Fox, 1990; Stone, 2010, 2012). To allow for better measurement model fit, additional items were trimmed from some constructs. One item (S3) was trimmed from structure and six items (MP2, MP3, MP6, MP8, MP9, MP12) were trimmed from management practices (Yaun & Bentler, 1997).

According to Hair et al. (2015), in order to evaluate whether the measurement model fits the study data, indices including chi-square (χ^2), comparative fit index (CFI), and root mean square error of approximation (RMSEA) must meet acceptable minimum values. Table 7 provides goodness-of-fit indices as described by Hair et al. (2015).

Table 7. Goodness-of-fit Indices

Indices	Goodness-of-fit Values
Chi-square (χ^2)	Significant <i>p</i> values expected
Comparative Fit Index (CFI)	0.90 >
Root Mean Square Error of Approximation (RMSEA)	< 0.08

(Hair et al., 2015)

The measurement model including all constructs (management practices, structure, task requirements and individual skills/abilities, motivation, employee engagement) exhibited acceptable fit based on the following indices: Chi-square χ^2 (393) = 819.084, $p < 0.000$; χ^2/df ratio = 2.084; comparative fit index (CFI) = 0.925; and root mean square error of approximation (RMSEA) = 0.071.

CFA was then performed on the measurement model excluding employee engagement. The model exhibited good fit based on the following indices: Chi-square χ^2

(127) = 222.121, $p < 0.000$; χ^2/df ratio = 1.749; comparative fit index (CFI) = 0.967; and root mean square error of approximation (RMSEA) = 0.059.

Structural Equation Model Study Group 1

The final measurement model, excluding employee engagement, was used to create the first structural model. This fully saturated model included the following constructs: structure; management practices; task requirements and individual skills/abilities; and motivation. This model analyzed the significance of each relationship among the constructs. Regressions weight results indicated that the relationship between structure and motivation ($\beta = 0.021$, $p = \text{ns}$) and management practices and motivation ($\beta = -0.008$, $p = \text{ns}$) were not significant. All other relationships were significant: structure and management practices ($\beta = 0.588$, $p < 0.001$); management practices and task requirements and individual skills/abilities ($\beta = 0.599$, $p < 0.001$); structure and task requirements and individual skills/abilities ($\beta = 0.334$, $p < 0.001$); task requirements and individual skills/abilities and motivation ($\beta = 0.964$, $p < 0.001$). The two non-significant relationships (structure and motivation and management practices and motivation) were left in the model, even at the risk of lowering the goodness-of-fit. The first structural model demonstrated acceptable goodness-of-fit with the following indices: Chi square χ^2 (111) = 198.275, $p < 0.000$; χ^2/df ratio = 1.786; comparative fit index (CFI) = 0.966; and root mean square error of approximation (RMSEA) = 0.060.

Hypothesis Testing Study Group 1

Six hypothesized relationships were tested among four constructs (structure, management practices, task requirement and individual skills/abilities, motivation) of the

Burke-Litwin Model of OPC. A multi-group analysis was then performed to test for the moderating effect of employee engagement on relationships among the four constructs.

When testing Hypotheses H1, H2, H3, H4, H5, and H6, the analysis was broken down into a unique study group (Study Group 1). Results from Study Group 1 were based on the first structural model and included structure, management practices, task requirements and individual skills/abilities and motivation. Study Group 1 did not include employee engagement.

Hypothesis H₁ predicted that *Employees perceive that structure significantly influences their motivation*. H₁ was not supported ($\beta = 0.021, p = \text{ns}$).

Hypothesis H₂ predicted that *Employees perceive that structure significantly influences management practices*. H₂ was supported ($\beta = 0.588, p < 0.001$).

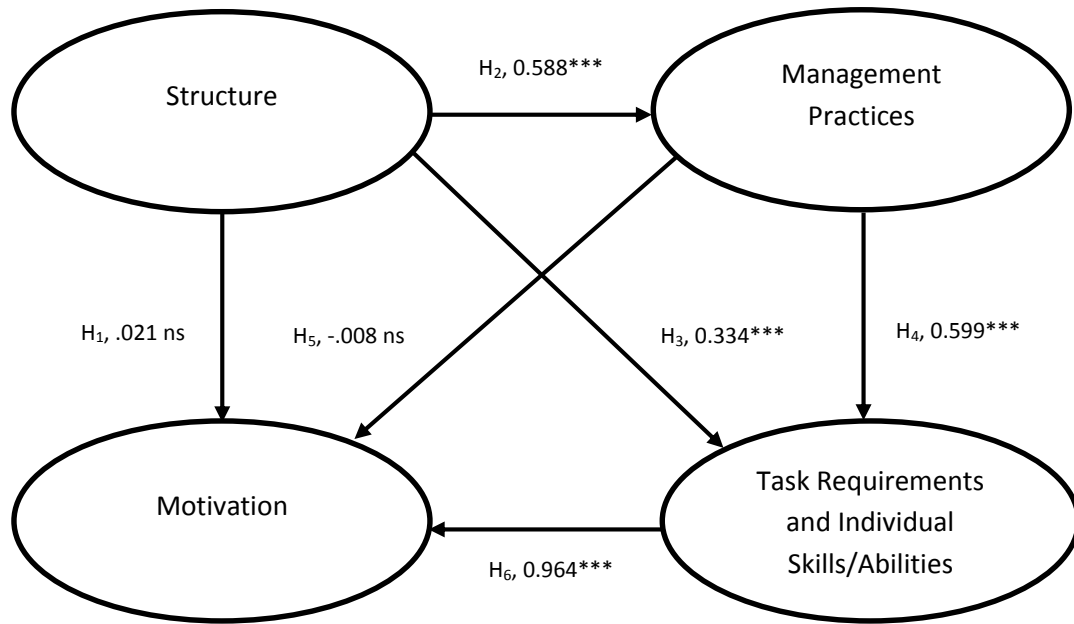
Hypothesis H₃ predicted that *Employees perceive that structure significantly influences task requirements and individual skills/abilities*. H₃ was supported ($\beta = 0.334, p < 0.001$).

Hypothesis H₄ predicted that *Employees perceive that management practices significantly influences task requirements and individual skills/abilities*. H₄ was supported ($\beta = 0.599, p < 0.001$).

Hypothesis H₅ predicted that *Employees perceive that management practices significantly influences their motivation*. H₅ was not supported ($\beta = -0.008, p = \text{ns}$).

Hypothesis H₆ predicted that *Employees perceive that task requirements and individual skills/abilities significantly influence their motivation*. H₆ was supported ($\beta = 0.964, p < 0.001$).

Figure 6 depicts the hypothesized relationships among the constructs in Study Group1.



*** $p < 0.001$

Figure 6. Hypothesized Model – Study Group 1

Moderation Testing Study Group 2

In order to test for the moderating effect of employee engagement on the relationships between structure, management practices, task requirements and individual skills/abilities, and motivation, a second structural model was created and a multi-group analysis was then performed to include the “low” and “high” groups of employee engagement data. This model demonstrated acceptable goodness-of-fit with the following fit indices: Chi square $\chi^2 (222) = 405.061, p < 0.000$; χ^2/df ratio = 1.825; comparative fit index (CFI) = 0.922; and root mean square error of approximation (RMSEA) = 0.062.

The multi-group analysis took into account the full sample data; 219 responses. First, the continuous variable employee engagement was recoded into two categorical variables; low and high. The groupings identified those respondents that scored as

having low employee engagement and high employee engagement. The low employee engagement group had a sample size of 101 and the high employee engagement group had a sample size of 118.

Hypotheses H1, H2, H3, H4, H5, and H6 were tested again for both the “low” and “high” groups of employee engagement with the following outcomes:

Low Group

Hypothesis H₁ predicted that *Employees perceive that structure significantly influences their motivation*. H₁ was not supported ($\beta = 0.106, p = \text{ns}$).

Hypothesis H₂ predicted that *Employees perceive that structure significantly influences management practices*. H₂ was supported ($\beta = 0.553, p < 0.000$).

Hypothesis H₃ predicted that *Employees perceive that structure significantly influences task requirements and individual skills/abilities*. H₃ was not supported ($\beta = 0.176, p = \text{ns}$).

Hypothesis H₄ predicted that *Employees perceive that management practices significantly influences task requirements and individual skills/abilities*. H₄ was supported ($\beta = 0.703, p < 0.000$).

Hypothesis H₅ predicted that *Employees perceive that management practices significantly influences their motivation*. H₅ was not supported ($\beta = -0.025, p = \text{ns}$).

Hypothesis H₆ predicted that *Employees perceive that task requirements and individual skills/abilities significantly influence their motivation*. H₆ was supported ($\beta = 0.880, p < 0.000$).

High Group

Hypothesis H₁ predicted that *Employees perceive that structure significantly influences their motivation*. H₁ was not supported ($\beta = -0.043, p = \text{ns}$).

Hypothesis H₂ predicted that *Employees perceive that structure significantly influences management practices*. H₂ was supported ($\beta = 0.546, p < 0.000$).

Hypothesis H₃ predicted that *Employees perceive that structure significantly influences task requirements and individual skills/abilities*. H₃ was supported ($\beta = 0.475, p < 0.000$).

Hypothesis H₄ predicted that *Employees perceive that management practices significantly influences task requirements and individual skills/abilities*. H₄ was supported ($\beta = 0.459, p < 0.000$).

Hypothesis H₅ predicted that *Employees perceive that management practices significantly influences their motivation*. H₅ was not supported ($\beta = 0.079, p = \text{ns}$).

Hypothesis H₆ predicted that *Employees perceive that task requirements and individual skills/abilities significantly influence their motivation*. H₆ was supported ($\beta = 0.946, p < 0.000$).

Figure 7 depicts the hypothesized relationships in Study Group 2.

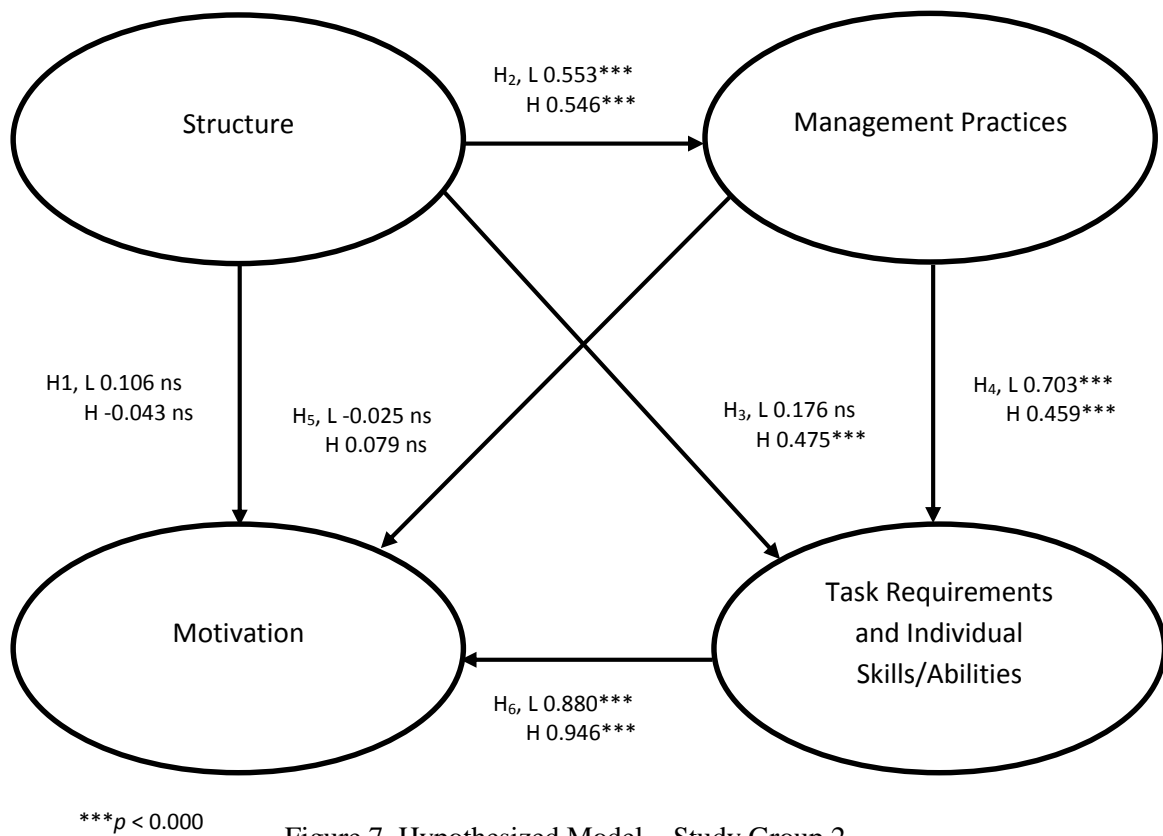


Figure 7. Hypothesized Model – Study Group 2

When comparing regression weights of Study Group 1 and Study Group 2, it was evident that employee engagement influenced some of the relationships, some of the time. For example, in reviewing the “low” employee engagement group, structure’s influence on task requirements was less strong than in the first structural model. In the “high” employee engagement group, structure’s influence on task requirements is stronger than in the first structural model. Also, in the “low” and “high” employee engagement groups, task requirements’ influence on motivation is higher than in the first structural model. These results are indicators that employee engagement had a

moderating effect on some of the constructs some of the time. Table 8 provides examples of changes in regression weights when comparing Study Group 1 and Study Group 2.

Table 8. Standardized Estimates

Hypothesis	Standardized Estimates		
	Study Group 1	Study Group 2/Low	Study Group 2/High
H ₁ Structure → Motivation	0.021 ns	0.106 ns	-0.043 ns
H ₂ Structure → Management Practices	0.588***	0.553***	0.546***
H ₃ Structure → Task Requirements	0.334***	0.176 ns	0.475***
H ₄ Management Practices → Task Requirements	0.599***	0.703***	0.459***
H ₅ Management Practices → Motivation	-0.008 ns	-0.025 ns	0.079 ns
H ₆ Task Requirements → Motivation	0.964***	0.880***	0.946***

Note: *** $p < 0.000$

Although the second structural model indicated acceptable goodness-of-fit with the data set, additional questions emerged regarding the moderating effect employee engagement had on specific measurement errors. Therefore, a final structural model was created as part of a post hoc analysis. Individual parameter constraints were removed in the final structural model from each item within the following constructs: structure; management practices; task requirements and individual skills/abilities; and motivation. The second and final structural models were then compared. Table 8 compares the unconstrained and constrained models, demonstrates the changes in χ^2 and df , and further demonstrates the moderating effect employee engagement on specific measurement errors within each construct.

Post-hoc Analysis

Results from Study Group 2 indicated that employee engagement moderated relationships among the constructs some of the time. A post hoc analysis took place to further analyze the effect that employee engagement had on the measurement error

associated with each item within each construct. The analysis was part of Study Group 3. The final structural model was fully constrained at the measurement residual level to where all items were equal. Then, each measurement residual was released, one at a time. Fit indices were then examined to determine if the difference in chi-square was significant. Table 9 indicates the difference in χ^2 was significant for measurement errors 8, 9, 14, 15, and 16, thus, demonstrating the significant moderating effect of employee engagement among some relationships within the model. Measurement errors 8 and 9 represent items four and five of the management practices construct. These items relate to the extent that management recognizes innovation and demonstrates a commitment to safety. Measurement errors 14, 15, and 16 represent items one, two, and three of task requirements and individual skills/abilities. These items relate to how challenged employees feel in their present job, whether the employee believes his or her skills, knowledge, and experience appropriately fit their job, and whether the right people are selected for promotion or assignment within the organization. The significant change in χ^2 further supports the findings that employee engagement influences employee perceptions as they relate directly to management practices and the tasks they are assigned coupled with their individual abilities.

Table 9. Test for Moderation by Employee Engagement

Model	χ^2	DF	CFI	$\Delta \chi^2$	Δ DF	Sig.
<i>Unconstrained</i>	405.061	222	0.922			$p < 0.05$
Measurement Weights	418.709	236	0.923	13.648	14	$p > 0.05$
Structural Weights	425.902	242	0.922	7.193	6	$p > 0.05$
Structural Residuals	432.404	245	0.921	6.502	3	$p > 0.05$
Measurement Residuals	473.603	264	0.911	41.199	19	$p < 0.05$
<i>Constrained</i>	443.439	239	0.913			$p < 0.05$
MR1 released	440.970	238	0.914	2.469	1	$p = \text{ns}$
MR2 released	442.088	238	0.914	1.118	1	$p = \text{ns}$
MR3 released	442.797	238	0.913	0.709	1	$p = \text{ns}$
MR4 released	439.953	238	0.914	2.844	1	$p = \text{ns}$
MR5 released	442.013	238	0.914	2.060	1	$p = \text{ns}$
MR6 released	441.472	238	0.914	0.541	1	$p = \text{ns}$
MR7 released	443.075	238	0.913	1.603	1	$p = \text{ns}$
MR8 released	439.276	238	0.915	3.799	1	$p < 0.05$
MR9 released	443.288	238	0.913	4.012	1	$p < 0.05$
MR10 released	442.362	238	0.913	0.926	1	$p = \text{ns}$
MR11 released	441.763	238	0.914	0.599	1	$p = \text{ns}$
MR12 released	443.039	238	0.913	1.276	1	$p = \text{ns}$
MR13 released	441.528	238	0.914	1.511	1	$p = \text{ns}$
MR14 released	437.175	238	0.916	4.353	1	$p < 0.05$
MR15 released	433.104	238	0.917	4.071	1	$p < 0.05$
MR16 released	441.442	238	0.914	8.338	1	$p < 0.05$
MR17 released	443.102	238	0.913	1.660	1	$p = \text{ns}$

Summary of the Chapter

This chapter provided data analysis results including an analysis of descriptive statistics, results from reliability testing of the survey instruments, confirmatory factor analysis results, an analysis of the measurement model results, an examination of the structural equation model, an analysis of the research hypotheses, and results from a post-hoc analysis.

Results indicate that the survey instruments utilized in the study (BLOAS and Rich Engagement Scale) exceeded the minimum threshold for internal consistency. Confirmatory factor analyses demonstrated the recursive nature of the Burke-Litwin Model of OPC. CFA also supported the extent to which, the observed variables are linked to their underlying latent factors of the Burke-Litwin Model of OPC, as indicated in previous empirical studies. The measurement model demonstrated acceptable fit to the study data.

The first structural model supported acceptable goodness-of-fit between the conceptual model and the study data as well. Hypotheses testing revealed that while the Burke-Litwin Model of OPC demonstrates a causal relationship between each of the constructs in this study, results did not indicate a significant relationship between structure and motivation and management practices and motivation (Burke & Litwin, 1992). Hypothesis H1 and Hypothesis H2 were not supported. The following relationships were supported as part of Study Group 1: structure and management practices; structure and task requirements and individual skills/abilities; management practices and task requirements and individual skills/abilities; and task requirements and individual skills/abilities and motivation.

Results from hypotheses testing for Study Group 2 revealed the moderating effect of employee engagement on some of the relationships among the constructs, some of the time. A post-hoc examination of the significance of the moderating effect of employee engagement was performed at the measurement residual level for each item within each construct. Results indicated the significant moderating effect of employee engagement among some relationships within the model.

Chapter Five

Discussion, Conclusions, Limitations, and Future Research

Introduction

This chapter includes a summary of the study, along with the associated research questions, an overview of the sample population and data collected, and a brief explanation of the literature used to support the study. The chapter also discusses findings from the statistical analysis of the data. Conclusions from the research are presented and discussed. Implications and practical uses of the research are offered, as well as opportunities for future research based on the findings. A summary is provided that includes the purpose of the study followed by an overview of the findings and conclusions.

Summary of the Study

As a result of increasing economic, social, and educational constraints being placed on institutions of higher education, administrators are evaluating new approaches to operating in such restrictive environments. Institutions must continue providing quality education and opportunities for research, generating revenue, and remaining competitive within the marketplace. To mitigate these constraints, institutional leaders are implementing organizational change structures that create efficiency, drive down costs and make the best use of human capital and technological resources.

There has been a recent surge of interest and push from higher education pundits and consultants to implement the shared services organizational structure in higher education enrollment management divisions. It is clear that the higher education industry is borrowing organizational change protocols from other industries and from across

various types of work groups. However, there is a lack of results-based research and empirical evidence that demonstrates the impact of this relatively new organizational phenomenon in higher education or on the employees within these environments. Further, the shared services organizational structure has not been examined in the higher education context utilizing valid and reliable causal organizational change models and measurement instruments.

Research questions were formulated based on the following: lack of literature surrounding the shared services concept in higher education enrollment management; the need for empirical and practical evidence supporting the concept; and the need to examine the shared services organizational structure utilizing reliable causal organizational change models and measurement instruments. Two research questions emerged based on these observations.

1. Is there a direct relationship between the following transactional constructs of the Burke-Litwin Model of Organizational Performance and Change: structure and motivation; structure and management practices; structure and task requirements and individual skills/abilities; management practices and task requirements and individual skills/abilities; management practices and motivation; task requirements and individual skills/abilities and motivation?
2. Does employee engagement moderate the relationships between structure, management practices, task requirements and individual skills/abilities, and motivation?

A variety of literature domains were explored in order to gather a full spectrum of practical and scholarly work to support the study. Specifically, literature from the

following domains were included: higher education; enrollment management; organizational performance and change; resource dependence theory; institutional theory; shared services; management practices; organizational structure; task requirements and individual skills/abilities (job-person match); motivation; and employee engagement.

Sample participants for the study were chosen through nonprobability convenience sampling and collected from 121, four-year, public universities from across the United States. Each public university operated a shared services unit on its campus and offered a combination of services such as admissions, registration, advising, financial aid, student cashing services, veteran's services, and student housing services. The universities had student populations ranging from approximately 1,000 to 76,000. Participants consisted of employees (entry level and managers) that worked in shared services units in enrollment management divisions in higher education institutions.

Findings

Analysis of the study data was performed using results from descriptive statistics, an independent sample t-test, reliability tests of the survey instruments, principal component analysis, confirmatory factor analysis, structural equation modeling, hypotheses testing, and a post-hoc analysis.

Study results revealed that early and late responders of the Organizational Assessment Survey were the same and no statistically significant difference existed between them. Reliability of the Burke-Litwin Organizational Assessment Survey and the Rich Engagement Scale was performed. Reliability scores indicated an acceptable measurement of reliability greater than .70 for the Burke-Litwin OAS. The reliability score for the Rich Engagement Scale of .95 also exceeded the minimum threshold for

reliability. A principal component analysis was performed to determine how much of the variance was attributed to certain items within each measurement scale. Six items with Eigenvalues greater than 1 accounted for 73.5% of the variance among the observed variables. The Eigenvalue results indicated that influence in the data was not a result of common method variance.

Confirmatory factor analysis (CFA) was performed at the construct level to examine the latent variables and to obtain factor loadings of each scale item. CFA results revealed the need to modify the model by adding error covariances and trimming some items. Factor loadings revealed that underlying latent factors are linked to the observed variables. CFA was then performed to analyze the interaction among all of the constructs in the measurement model. CFA revealed that the measurement model was recursive, supporting previous empirical studies that the Burke-Litwin Model of OPC is a causal model (Anderson-Rudolf, 1996; Di Pofi, 2002; Falletta, 1999; Fox, 1990; Stone, 2010, 2012). CFA results from the measurement model including all constructs (management practices, structure, task requirements and individual skills/abilities, motivation, employee engagement) revealed that the model fit the study data. CFA was then performed on the measurement model excluding employee engagement. This model also exhibited acceptable goodness-of-fit to the study data.

Structural equation modeling was used to create the first structural model which included all constructs except employee engagement (structure, management practices, task requirements and individual skills/abilities, motivation). Results established that the relationship between structure and motivation and management practices and motivation were not significant. All other relationships were significant: structure and management

practices; management practices and task requirements and individual skills/abilities; structure and task requirements and individual skills/abilities; task requirements and individual skills/abilities and motivation. The model demonstrated acceptable goodness-of-fit with the study data even after leaving the two non-significant relationships in the model.

A second structural model was created to test the moderating effect of employee engagement. The model included employee engagement data separated into two different groups; those who were identified as having “low” employee engagement and those identified as having “high” employee engagement. The model demonstrated acceptable goodness-of-fit to the study data and indicated that employee engagement did, in fact, moderate relationships among some of the constructs some of the time. Results continued to provide evidence that there was no direct relationship between structure and motivation and management practices and motivation.

The study’s hypotheses predicted positive relationships between the following constructs: structure and motivation; structure and management practices; structure and task requirements; management practices and task requirements; management practices and motivation, and task requirements and motivation. Six hypotheses were tested within two different study groups: Study Group 1 and Study Group 2. Study Group 1 did not include the construct of employee engagement and only reviewed direct relationships among the other variables. The hypotheses along with testing results are as follows for Study Group 1:

Hypothesis H₁ predicted that *Employees perceive that structure significantly influences their motivation*. H₁ was not supported.

Hypothesis H₂ predicted that *Employees perceive that structure significantly influences management practices*. H₂ was supported.

Hypothesis H₃ predicted that *Employees perceive that structure significantly influences task requirements and individual skills/abilities*. H₃ was supported.

Hypothesis H₄ predicted that *Employees perceive that management practices significantly influences task requirements and individual skills/abilities*. H₄ was supported.

Hypothesis H₅ predicted that *Employees perceive that management practices significantly influences their motivation*. H₅ was not supported.

Hypothesis H₆ predicted that *Employees perceive that task requirements and individual skills/abilities significantly influence their motivation*. H₆ was supported.

Study Group 2 tested the same six hypotheses for both the “low” and “high” employee engagement groups. The hypotheses along with testing results are as follows for Study Group 2:

Low Group

Hypothesis H₁ predicted that *Employees perceive that structure significantly influences their motivation*. H₁ was not supported.

Hypothesis H₂ predicted that *Employees perceive that structure significantly influences management practices*. H₂ was supported.

Hypothesis H₃ predicted that *Employees perceive that structure significantly influences task requirements and individual skills/abilities*. H₃ was not supported.

Hypothesis H₄ predicted that *Employees perceive that management practices significantly influences task requirements and individual skills/abilities*. H₄ was supported.

Hypothesis H₅ predicted that *Employees perceive that management practices significantly influences their motivation*. H₅ was not supported.

Hypothesis H₆ predicted that *Employees perceive that task requirements and individual skills/abilities significantly influence their motivation*. H₆ was supported.

High Group

Hypothesis H₁ predicted that *Employees perceive that structure significantly influences their motivation*. H₁ was not supported.

Hypothesis H₂ predicted that *Employees perceive that structure significantly influences management practices*. H₂ was supported.

Hypothesis H₃ predicted that *Employees perceive that structure significantly influences task requirements and individual skills/abilities*. H₃ was supported.

Hypothesis H₄ predicted that *Employees perceive that management practices significantly influences task requirements and individual skills/abilities*. H₄ was supported.

Hypothesis H₅ predicted that *Employees perceive that management practices significantly influences their motivation*. H₅ was not supported.

Hypothesis H₆ predicted that *Employees perceive that task requirements and individual skills/abilities significantly influence their motivation*. H₆ was supported.

A post-hoc analysis was performed to further analyze the moderating effect of employee engagement at the measurement residual level. A final structural model was

created and all items were constrained to be equal. Then, individual parameter constraints were released, one at a time, from each of the constructs: structure; management practices; task requirements and individual skills/abilities; and motivation. The second and final structural models were then compared. Significant changes in χ^2 and df further supported the moderating effect of employee engagement among some relationships within the model.

Conclusions

It is evident that understanding and dissecting the shared services concept is equally as complex as fully understanding the concept of organizational change and all that it affects. The goal of this study was to review the shared services concept within the specific context of higher education enrollment management. The application of the well-established Burke-Litwin Model of Organizational Performance and Change (Burke & Litwin, 1992) was imperative in analyzing the relationships often found among change constructs and in examining how these relationships influence one another when employee engagement is added to the model.

Findings of this study lend significant support to previously established research regarding the Burke-Litwin Model of Organizational Performance and Change (Anderson-Rudolf, 1996; Di Pofi, 2002; Falletta, 1999; Fox, 1990; Stone, 2010, 2012). Study results supported the recursive nature of the model and the causal relationships among the following constructs: structure and management practices; structure and task requirements and individual skills/abilities; management practices and task requirements and individual skills/abilities; and task requirements and individual skills/abilities and motivation.

At the same time, study results revealed a significant need to re-evaluate the Burke-Litwin (1992) Model of OPC and consider other factors as influencers or moderators of relationships among constructs in the model. Study results clearly demonstrated that the relationships between the constructs are moderated by employee engagement. In Burke & Litwin's (1992) earliest research regarding organizational change, other specific constructs were not considered as having influence on the strength of relationships within the model. Further, the model itself was designed in such a way that the feedback loop operated as more of a constraint to the model. If a construct did not operate within the feedback loop, then it was not considered as having a role in organizational change.

During the data analysis phase it was established that some of the items within individual constructs of the Burke-Litwin Organizational Assessment Survey were very similar. Modification indices from confirmatory factor analyses proved the need to covary these items in order for the model to fit the study data. For example, seven items were originally covaried with the construct of management practices. Two items were also covaried within the construct of motivation. Previous studies involving the Burke-Litwin Model of OPC did not address the issue of multi-collinearity among the items of the constructs (Anderson-Rudolf, 1996; Di Pofi, 2002; Falletta, 1999; Fox, 1990; Stone, 2010, 2012). Future implications include the need to further evaluate the Burke-Litwin Organizational Assessment Survey.

Three very significant findings came from this study. First, results indicate that within the Burke-Litwin Model of OPC, there is no direct relationship between structure and motivation and management practices and motivation. Second, while Burke and

Litwin (1992) offer no direct mention of the relationship between structure and motivation within their model, they have based the construct of structure on the earlier work of Peters (1988). Peters (1988) offers that formal, restrictive, and bureaucratic organizations inhibit positive behavior of employees. Peters (1988) describes informal and less bureaucratic structures as empowering, engaging, and motivating.

The same can be said for the direct relationship between management practices and motivation. While Burke and Litwin (1992) offer no direct mention of the relationship between management practices and motivation within their model, they have based the construct of management practices on the earlier work of Luthans (1988) who contends that the activities associated with management practices are clearly designed to motivate employees. These findings are noteworthy and require further review of the Burke-Litwin Model (1992).

Third, the relationship between task requirements and individual skills/abilities (job-person match) and motivation are of special note. This is the only direct relationship between the constructs and motivation that was fully supported by both the literature and data analysis (Burke & Litwin, 1992; Lauver & Kristof-Brown, 2001). This finding has significant implications for future research and practical applications as it relates to shared services models in the higher education context.

Paramount to this study was the construct of employee engagement. Results from the study indicated that employee engagement serves as a moderator of relationships among constructs in the Burke-Litwin Model of OPC (1992), thus influencing individual motivation. It is important to note that employee engagement did not directly moderate relationships among the constructs, but rather worked in concert with other variables to

significantly influence some of the relationships. This finding is in alignment with the seminal work of Kahn (1990) and the Rich Job Engagement Scale (Rich et al., 2010)

During data analysis, it was determined that items within the Rich Scale (Rich et al., 2010) rendered very similar meanings. Modification indices demonstrated the need to covary many items and eventually trim some from the final structural model. These results are indicative of the need to further develop the Rich Scale (Rich et al., 2010).

Implications

Burke-Litwin Model of Organizational Performance and Change. The Burke-Litwin Model of Organizational Performance and Change (1992) has been empirically studied for almost three decades across a wide spectrum of industries and organizations. During this time, researchers have worked to examine and evaluate the model as it was defined by Burke and Litwin (1992); a recursive model consisting of twelve organizational change dimensions that function in a feedback loop. No other studies have provided a comprehensive overview of the model with suggestions for further development including the addition of other constructs or direct relationships among some constructs that were not previously identified. Burke and Litwin (1992) offer in their own writings that their model does not suggest at which construct change may begin, but rather, that it may happen at any location within the model. Adding direct paths from constructs such as structure and motivation and management practices and motivation may strengthen the model and give further credence to the notion that change can begin anywhere in the model and have an impact on other constructs. Literature from the likes of Peters (1988) and Luthans (1988) already support this view but statistical evidence is lacking.

Burke-Litwin Organizational Assessment Survey. Further development of the Burke-Litwin Organizational Assessment Scale is necessary. Data analysis concluded that some items among each construct presented high covariances. Since no official instrument manual exists, evaluating the impetus for the specific items within the instrument is difficult. Further, evidence of instrument validation and reliability has been limited to only the work of Stone (2012). Additional evaluation of the instrument may lead to the removal of some unnecessary items within the survey and may increase instrument validation. To better operationalize the constructs within the survey, qualitative research and analysis may provide further insight into the true intent and meaning of the survey items. Qualitative research may enhance the credibility, dependability, confirmability and transferability of the instrument.

Rich Job Engagement Scale. In addition to previous recommendations, further development of the Rich Job Engagement Scale is necessary. While the Rich Scale has been utilized in many scholarly works, the instrument is still relatively new. During the data analysis phase, modification indices demonstrated that many items within the scale were very similar, thus, several items were trimmed from the construct. Rich et al. (2010) discuss in their own work that items for the survey were taken from previous scales created by Brown and Leigh (1996), Russell and Barrett (1999), and Rothbard (2001). Rich et al. (2010) also contend that while developing and testing their scale, items often correlated and strong interrelationships among the three engagement dimensions did exist. High covariances among the dimensions within the scale demonstrate a significant need to reevaluate the instrument and determine if, it indeed,

precisely measures Kahn's (1990) conceptualization of physical, cognitive and emotional energies.

Practical implications for higher education administrators. This study offered a unique look into a phenomenon that is sweeping the higher education landscape. Further, the study provided an exclusive look into the interplay between organizational change dimensions and the influence of employee engagement on those dimensions. To-date, no scholarly research has been done on the concept of shared services within higher education enrollment management. Thus, no guidebooks, manuals or instruments exist to evaluate the impact of organizational change relationships on the motivation of employees within those units. This study has provided substantial evidence that it is important to appropriately match the skill set of the individual to the right job (job-person match) in order to motivate the employee. Further, job engagement has been found to strengthen the relationship between task requirements and individual motivation.

This finding has significant implications for higher education administrators, especially those administrators overseeing shared services units in enrollment management. Administrators now have some foundation upon which to guide their shared services units. Administrators can utilize this study as a framework to direct the implementation of a shared service unit or serve as a guide to maintain such a complex unit and promote employee motivation. While this study is not completely generalizable across all higher education institutions, its outcomes can be viewed as recommendations that may assist in reducing turnover rates and encouraging staff development, training, and cross-collaboration within shared services units.

Chapter two offers a comprehensive literature review as it relates to the shared services concept in higher education enrollment management. The literature review amalgamated theory that aided in explaining organizational performance and change, resource dependence theory, institutional theory, shared services, management practices, organizational structure, task requirements and individual skills/abilities (job-person match), motivation and employee engagement. Thus, this study adds to the body of knowledge surrounding shared services in the higher education context and makes a significant contribution to scholarly work on this topic. To-date, no academic work has been available to guide and direct higher education administrators when implementing the shared services concept. As referenced in Chapter One, institutional administrators have been changing their organizational structures for the sake of changing or simply basing their change strategy on practitioner based journals and articles. This study provides sound theory, literary evidence, and statistical analyses to better understand the implementation of shared services units in the higher education enrollment management context.

Limitations

While this study offers significant contributions to the literature base surrounding shared services and provides substantial practical implications for practitioners, the study is not void of its own limitations. The generalizability of the study is one such limitation. The use of non-probability sampling as well as the narrow contextual environment in which the study took place, impacts the ability of the results to be generalized across other types of higher education institutions (e.g., private colleges and universities, two-year colleges, vocational/technical schools, etc.).

It is important to note that the response rate for the study may have been negatively impacted by the length of the Organizational Assessment Survey. The survey included 79 questions and took respondents approximately 10-15 minutes to complete. Respondents become less motivated to respond and often abandon surveys when the optimal survey length has been exceeded (Galesic & Bosnjak, 2009; Lugtigheid & Rathod, 2005). A shorter survey may have garnered a greater response, thus producing better external validity and fewer Type-I or Type-II errors.

Another potential limitation to the study includes self-report bias (common rater effect) which could contribute to common method variance. The respondent to the online survey was the same individual that provided the measure for both the predictor and criterion variable (Podsakoff et al., 2003). To mitigate some of the risks, the Organizational Assessment Survey utilized a combination of response options taken from the original Burke-Litwin Organizational Assessment Survey and the Rich Job Engagement Scale. Also, principal component analysis was performed to determine how much of the variance among the survey constructs was attributed to certain items within each measurement scale. While online surveying could potentially yield self-report bias, data analysis revealed that common method variance was not a significant risk to the study.

Future Research

While this study has made a number of significant contributions to the body of knowledge surrounding shared services in higher education enrollment management, more research is needed to better explore organizational change in this context. As referenced in Chapter two, shared services is not a new concept. However, the

implementation of this particular structural model is relatively new to higher education. It is imperative that researchers discuss this structural concept more freely and openly in academia so that scholars and practitioners alike, may gain valuable insight into the complexity of the concept, nuances of the model, and how its unique design impacts employees within the model.

This study approached data collection and analysis from a quantitative standpoint. While results yielded significant contributions to the literature and to practice, the study could not provide the deep and rich data that only comes from qualitative research. Due to the complex nature of the shared services concept and the relative newness of the concept to higher education enrollment management, qualitative research would provide a better contextual understanding of the unique organizational structure. Qualitative research on this topic would allow participants to explain their interactions with one another and within the particular setting, from their point of view, instead of the researcher's. Further, qualitative research will allow theory to emerge from the data rather than testing theories on static data (Bryman & Bell, 2011).

Future research, whether it be quantitative or qualitative, must look further into the theories behind organizational change, as it relates to higher education enrollment management. Chapter two discusses resource dependency theory and institutional theory. The former explains why external forces cause change and the later discusses how internal rules, policies and procedures influence change (Casciaro and Piskorski, 2005; DiMaggio & Powell, 1983; Kondra & Hinings, 1998). Looking further into institutional theory, a sub-theory of institutional isomorphism emerges (DiMaggio & Powell, 1983; Kondra & Hinings, 1998). Institutional isomorphism, in layman's terms, means "keeping

up with the Jones’’. As higher education consultants and pundits continue to strongly encourage the implementation of shared services within the higher education enrollment management context and with no playbook available, it is fair to assume that institutional isomorphism is a potential factor in driving much of the change that has taken place in the last decade.

This study also revealed opportunities for future research and examination of the Burke-Litwin Model of Organizational Performance and Change. The Burke-Litwin Model of OPC has been discussed as part of scholarly research for almost three decades. However, no discussion has taken place regarding the potential other constructs have to impact relationships within the model. As evidenced in this study, relationships within the model do exist but are moderated by employee engagement. Whether it be moderation or mediation, the properties of moderator or mediator variables have the potential to impact people’s behavior significantly (Baron & Kenny, 1986). Future research on this topic would allow scholars to more deeply probe into the causal nature of the Burke-Litwin Model of OPC and examine the efficacy of the model in practical applications.

In addition, further review of the Burke and Litwin Model of OPC (1992) is warranted based on evidence of direct paths that may exist within the model that have not been previously identified. While this study revealed foundational literature that suggested a direct path from structure to motivation and management practices to motivation, other such direct relationships may exist. A more in depth review of literature surrounding constructs within the model as well as additional empirical research may serve to support a modified model.

Summary of the Chapter

This chapter provided a summary of the study, a description of the findings, and a discussion regarding significant conclusions made from data analysis and literature review. Implications of the study were also discussed as they relate to the Burke-Litwin Model of Organizational Performance and Change, the Burke-Litwin Organizational Assessment Survey, and the Rich Job Engagement Scale. Practical implications were also offered for higher education administrators. Limitations of the study were also discussed followed by suggestions and recommendations for future research, and a chapter summary.

References

- Academic Impressions. (2014). *About AI*. Retrieved from
<http://www.academicimpressions.com/about-ai>
- Accenture. (2005). *The Government executive series: Driving high performance in government: Maximizing the value of public-sector shared services*. Retrieved from
http://www.accenture.com/SiteCollectionDocuments/PDF/Accenture_Driving_High_Performance_in_Government_Maximizing_the_Value_of_Public_Sector_Shared_Services.pdf
- Accenture. (2010). *Shared services talent management: Lessons from the masters*. Retrieved from
http://www.accenture.com/SiteCollectionDocuments/PDF/Accenture_Shared_Services_Talent_Management_Lessons_from_the_Masters.pdf
- Administrative Services Transformation. *University of Michigan*. (2013). Retrieved from
<http://ast.umich.edu/sharedservices.html>
- Albrecht, R., Goldstein, P. J., Pirani, J. A., & Spicer, D. Z. (2004). *Shared services: Three examples of multi-institutional collaboration*. Boulder, CO: Educause Center for Applied Research (ECAR).
- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (1999). Standards for educational and psychological testing. Washington, DC: American Educational Research Association.
- Anderson-Rudolf, M. K. (1996). *A longitudinal study of organizational change: How change in individual perceptions of transformational and transactional constructs*

predicts change in organizational performance. Retrieved from ProQuest Digital Dissertations and Theses database.

- Armenakis, A. A., Mossholder, K. W., & Harris, S. G. (1990). Diagnostic bias in organizational consultation. *International Journal of Management Science*, 18, 563-572.
- Babbie, E. (1999). *The basics of social research*. Belmont, CA: Wadsworth.
- Babbie, E. (2004). *The practice of social research* (10th ed.). Belmont, CA: Wadsworth.
- Bandura A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Baum, S., Ma, J., & Payea, K. (2012). *Trends in Public Higher Education: Enrollment, Prices, Student Aid, Revenues, and Expenditures*. Retrieved from <http://trends.collegeboard.org/sites/default/files/trends-2012-public-higher-education-expenditures-brief.pdf>
- Baum, J. A. C., & Oliver, C. (1991). Institutional linkages and organizational mortality. *Administrative Science Quarterly*, 36, 187-218.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Bennis, W.G., & Nanus, B. (1985). *Leaders: The Strategies for taking charge*. New York: Harper & Row.
- Bergeron, B. (2003). *Essentials of Shared Services*. Hoboken, New Jersey: John Wiley & Sons, Inc.

- Bergquist, W. (1998). The postmodern challenge: Changing our community colleges. In J. S. Levine (Ed.), *Organizational change in the community college: A ripple or a sea of change*. San Francisco: Jossey-Bass.
- Bernstein, W., & Burke, W. W. (1989). Modeling organizational meaning systems. In R. W. Woodman & W. A. Pasmore (Eds.), *Research in organizational change and development*. Greenwich, Conn: JAI Press.
- Birnbaum, R. (2000). *Management Fads in Higher Education*. San Francisco: Jossey-Bass.
- Bischoff, P. (2007). *Strategic Enrolment Management Concepts, Structures and Strategies*. Retrieved from http://www.douglas.bc.ca/__shared/assets/SEM_Concepts__Structures_and_Strategies-Dec200750580.pdf
- Boeing. (2013). *Shared services group*. Retrieved from <http://www.boeing.com/boeing/ssg/>
- Boyatzis, R. (1982). *The competent manager*. New York: Wiley and Sons.
- Brown, S. P., & Leigh, T. W. (1996). A new look at psychological climate and its relationship to job involvement, effort, and performance. *Journal of Applied Psychology*, 81(4), 358-368.
- Bryman, A., & Bell, E. (2011). *Business Research Methods* (3rd ed.). New York: Oxford University Press.
- Bullock, R. J., & Lawler, E. E., III. (1984). Gainsharing: A few questions and fewer answers. *Human Resource Management*, 23, 23-40.

- Burke, W. W. (2008). *Organization change theory and practice*. Los Angeles: Sage Publications.
- Burke, W.W. (2011). *Organization change: Theory and practice*. (3rd ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- Burke, W.W., Coruzzi, C.A., & Church, A.H. (1996). *The organizational survey as an intervention for change*. In Kraut, A.I. (Ed.). *Organizational Surveys: Tools for Assessment and Change*. San Francisco: Jossey Bass.
- Burke, W. W., & Jackson, P. (1991). Making the SmithKline Beecham Merger Work. *Human Resource Management*, 30.
- Burke, W.W. & Litwin, G.H. (1992). A causal model of organizational performance and change. *Journal of Management*, 18(3), 523-545.
- Burnes, B. (1996). *Managing change: A strategic approach to organizational dynamics*. London: Pitman.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Burns, T., & Stalker, G. (1961). *The management of innovation*. London: Tavistock.
- Burns, T., & Yeaton, K. (2008). *Success Factors for Implementing Shared Services in Government. Competition, Choice, and Incentives Series*. Retrieved from <http://faculty.cbpp.uaa.alaska.edu/afgjp/PADM610/Shared%20Services%20in%20Government.pdf>
- Campbell, J. P., Dunnette, M. D., Lawler, E. E., III., & Weick, K. E., Jr. (1970). *Managerial behavior, performance, and effectiveness*. New York: McGraw-Hill.

- Carlson, S. (2012). Outlook for Higher Education Remains Mixed, Moody's Says. *Chronicle of Higher Education*. Retrieved from <http://chronicle.com/article/article-content/130434/>
- Casciaro, T., & Piskorski, M. J. (2005). Power imbalance, mutual dependence, and constraint absorption: A closer look at resource dependence theory. *Administrative Science Quarterly*, 50(2), 167-199.
- Cheslock, J. J., & Gianneschi, M. (2008). Replacing state appropriations with alternative Revenue sources: The case of voluntary support. *The Journal of Higher Education*, 79(2), 208-229.
- Christensen, C. M., & Raynor, M. E. (2003). Why hard-nosed executives should care about management theory. *Harvard Business Review*, September, 67-74.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). Applied multiple regression/correlation analysis for the behavioral sciences (3rd ed.). New York: Routledge.
- Cooke, F. L. (2006). Modeling an HR shared services center: Experience of an MNC in the United Kingdom. *Human Resource Management*, 45(2), 211-227.
- Coomes, M. D. (2000). The historical roots of enrollment management. *New Directions for Student Services*, 89, 5-18.
- Dacin, T., Goodstein, J., & Scott, R. (2002). Institutional theory and institutional change: Introduction to the special research forum. *Academy of Management Journal*, 45(1), 45-57.
- Davis, G., & Cobb, A. (2009). *Resource dependence theory: Past and future*. Retrieved from http://webuser.bus.umich.edu/gfdavis/Papers/davis_cobb_09_RSO.pdf

- Deal, T. E., & Kennedy, A. A. (1982). *Corporate cultures: The rites and rituals of corporate life*. Reading, MA: Addison-Wesley.
- Deloitte & Touche, (2011). *Shared services in the higher education sector*. Retrieved from http://www.deloitte.com/view/en_IE/ie/industries/publicsector/bb078cb6dbe73310VgnVCM1000001a56f00aRCRD.htm
- Derven, M. (2011). *Advancing the shared services journey through training*. Retrieved from <http://www.astd.org/Publications/Magazines/TD/TD-Archive/2011/09/Advancing-the-Shared-Services-Journey-Through-Training>
- DiMaggio, P., & Powell, W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147-160.
- DiMaggio, P. & Powell, W. (1991). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. In W. Powell & P. DiMaggio (Eds.), *The new institutionalism in organizational analysis*. Chicago: University of Chicago.
- Di Pofi, J. A. (2002). Organizational diagnostics: Integrating qualitative and quantitative methodology. *Journal of Organizational Change Management*, 15(2), 156-168.
- Dolence, M. G. (1993). *Strategic enrollment management: A primer for campus administrators*. Washington, D.C.: American Association of Collegiate Registrars and Admissions Officers.
- Dove, C. (2004). *The shared service center: A model for university efficiency?* Retrieved from ProQuest Dissertations and Theses. (AAI3124682)

- Duncan, R. (1979). What is the right organization structure? *Organizational Dynamics*, 7(3), 59-80.
- Edwards, J.R. (1991). Person-job fit: A conceptual integration, literature review and methodological critique. *International Review of Industrial Organizational Psychology*, 6, 283-357.
- Edwards, J. R. (1996). An examination of the competing versions of the person-environment fit approach to stress. *Academy of Management Journal*, 39(2), 292-339.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 7(3), 500-507.
- Emerson, R. M. (1962). Power-dependence relations. *American Sociological Review*, 27, 31-40.
- Evans, M.G. (1986). Organizational behavior: The central role in motivation. *Journal of Management*, 12(2), 203-222.
- Falletta, S. V. (1999). *Assessing the statistical conclusion and predictive validity of a diagnostic model and survey of organizational performance and change*. Retrieved from ProQuest Digital Dissertations and Theses database.
- Fligstein, N. (1991). The structural transformation of American industry: An institutional account of the causes of diversification in the largest firms, 1919-1979. In Walter W. Powell and Paul J. DiMaggio (Eds.), *The new institutionalism in organizational analysis*. Chicago: University of Chicago Press.
- Forst, L. I. (2001). Shared Services Grows Up. *Journal of Business Strategy*, 22(4), 13-15.

- Fox, M. M. (1990). *The role of individual perceptions of organization culture in predicting perceptions of work unit climate and individual and organizational performance*. Retrieved from ProQuest, UMI Dissertations Publishing. (9118568).
- Fyfe, T. (2006). *Fine tuning shared services: It's a different road in the public sector*. Retrieved from www.itworldcanada.com
- Galbraith, J.R. (1974). Organization design: An information processing view. *Interfaces*, 4(3), 28-36.
- Galesic, M., & Bosnjak, M. (2009). Effects of questionnaire length on participation and indicators of response quality in a web survey. *Public Opinion Quarterly*, 73(2), 349-360.
- Gates, G. (1997). Isomorphism, homogeneity, and rationalism in university retrenchment. *The Review of Higher Education*, 20(3), 253-275.
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference. 11.0 update* (4th ed.). Boston: Allyn & Bacon.
- Glenn, R. (2009). Shared enrollment services as a potential SEM strategy. *College and University*, 84(3), 79-84.
- Gliner, J. A., Morgan, G. A., & Leech, N. L. (2009). *Research methods in applied settings: An Integrated approach to design and analysis* (2nd ed.). New York: Routledge.
- Goff, J. Gragg, L., & Montgomery, R. (2009) *Building a SEM Organization as a Data Driven Consultant*. [PowerPoint slides]. Retrieved from <http://enrollment.mst.edu/presentations/>

- Greene, J.P., Kisisa, B., & Mills, J. (2010). Administrative bloat in American universities: The real reason for high costs in higher education. *Policy Report. Goldwater Institute*, 239, 1-19. Retrieved from <http://goldwaterinstitute.org/sites/default/files/Administrative%20Bloat.pdf>
- Government Accountability Office. (2012). *Postsecondary education: Financial trends in public and private nonprofit institutions*. Retrieved from <http://www.gao.gov/assets/590/587941.pdf>
- Gulati, R. (2007). *Silo busting: How to execute on the promise of customer focus*. Retrieved from <http://lms.ctl.cyut.edu.tw/sysdata/user/79/9722616/blog/doc/7b2108c94528ce0a/attach/98738.pdf>
- Gumport, P. (2001). Restructuring: Imperatives and opportunities for academic leaders. *Innovative Higher Education*, 25(4), 239-251.
- Hackman, J. R., & Oldham, G. R. (1980). *Work Redesign*. Reading, MA: Addison-Wesley.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis*. Upper Saddle River, NJ: Prentice Hall.
- Hannan, M. T., & Freeman, J. (1984). Structural inertia and organizational change. *American Sociological Review*, 49, 149-164.
- Henderson, S. E. (2008). Admissions' evolving role: From gatekeeper to strategic partner. In B. Lauren (Ed.), *The college admissions officers' guide*. Washington, DC: American Association of Collegiate Registrars and Admissions Officers.

- Hillman, A., Withers, M., & Collins, B. (2009). Resource dependence theory: A review. *Journal of Management*, 35(6), 1404–1427.
- Hinings, B., & Greenwood, R. (1988). *The normative prescription of organizations' in institutional patterns and organizations: Culture and environment*. L. G. Zucker (ed.). Cambridge, MA: Ballinger.
- Hoelter, J.W. (1983). The analysis of covariance structures: Goodness-of-Fit Indices. *Sociological Methods & Research*, 11(3), 325-344.
- Holland, J. L. (1985). *Making vocational choices: A theory of careers*. (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Huddleston, T., Jr., (2000). Enrollment management. *New Directions for Higher Education*, 111, 65-73.
- Huddleston, T., Jr., & Rumbough, L. P. (1997). Evaluating the enrollment management organization. *College and University*, 72(4), 2–5.
- Innovative Educators. (2014). *About us*. Retrieved from <http://www.innovativeeducators.org/About-Us-s/17.htm#ourmission>
- Irwin, D. (2005). *Financial management shared services: A guide for federal users*. AGA CPA G Research Series: Report No. 2. Retrieved from <http://www.agacgfm.org/AGA/ResearchPublications/documents/SharedServicesResearchPaper.pdf?ext=.pdf>
- Janssen, M., & Joha, A. (2006). Motives for establishing shared service centers in public administrations. *International Journal of Information Management*, 26, 102–115.

- Johal, N. (2013). *Higher education institutions take the next step with shared services*.
<http://www.ovum.com/higher-education-institutions-take-the-next-step-with-shared-services/>
- Johnson & Johnson Services, Inc. (2013). *About us*. Retrieved from
<https://www.ap.jnj.com/na/en?country=US>
- Kahn, W. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724.
- Kanfer, R. 1990. Motivation theory and industrial and organizational psychology. In M. D. Dunnette & L.M. Hough (Eds.) *Handbook of industrial and organizational psychology*. Palo Alto, CA: Consulting Psychologists Press.
- Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations* (2nd ed.), New York: Wiley.
- Kelley, S. (2010). *Cornell to save at least \$75 million annually by 2015*. Cornell Chronicle. Retrieved from <http://www.news.cornell.edu/stories/2010/07/cornell-save-least-75-million-annually-2015>
- Kemerer, F., Baldrige, J. V., & Green, K. (1982). *Strategies for Effective Enrollment Management*. Washington, D.C.: American Association of State Colleges and Universities.
- Kezar, A. (2001). Understanding and facilitating organizational change in the 21st century: Recent research and conceptualizations. *ASHE-ERIC Higher Education Report*, 28(4), iii-153.

- Kezar, A., & Eckel, P. (2002). Examining the institutional transformation process: The importance of sensemaking, interrelated strategies, and balance. *Research in Higher Education*, 43(3), 295-328.
- Kilgore, W. (n.d.). AACRAO Consulting/*Building Student-Centric Processes – A Guide to Business Process Analysis and Reengineering*. Retrieved from http://consulting.aacrao.org/publications_events/publications/building-student-centric-processes/
- King, P. (1998). Operating a high-performance shared services centre. *Management Accounting: Magazine for Chartered Management Accountants*, 76(9), 1-3.
- Kondra, A., & Hinings, C. (1998). Organizational diversity and change in institutional theory. *Organization Studies*, 19(5), 743-767.
- Kotter, J. (1982). *The General Managers*, New York; Free Press.
- Kristof, A. (1996). Person-organization fit: An integrative review of its conceptualizations, measurements, and implications. *Personnel Psychology*, 49(1), 1-49.
- Kristof-Brown, A.L., Zimmerman, R.D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology*, 58(2), 281-342.
- Kuhnert, K.W., & Lewis, P. (1987). Transactional and transformational leadership: A constructive/developmental analysis. *Academy of Management Review*, 12(4), 648-657.
- Kurre, F.L. (2012). *The state of higher education in 2012*. Retrieved from

http://www.grantthornton.com/staticfiles/GTCom/Not-for-profit%20organizations/NotForProfit%20files/state_of_higher_education_2012_whitepaper_final.pdf

Kurre, F.L. (2013). *Foreward*. The state of higher education in 2013: Pressures, changes and new priorities. Retrieved from

<http://www.grantthornton.com/staticfiles/GTCom/Not-for-profit%20organizations/The%20state%20of%20higher%20education%20in%202013.pdf>

Kurz, K., & Scannell, J. (2006). Enrollment Management Grows Up. *University Business*, May. Retrieved from

<http://www.universitybusiness.com/article/enrollment-management-grows>

Ladd, L. (2012). *The state of higher education in 2012*. Retrieved from

http://www.grantthornton.com/staticfiles/GTCom/Not-for-profit%20organizations/NotForProfit%20files/state_of_higher_education_2012_whitepaper_final.pdf

Ladd, L. (2013). *The state of higher education in 2013*. Retrieved from

<http://www.grantthornton.com/staticfiles/GTCom/Not-for-profit%20organizations/The%20state%20of%20higher%20education%20in%202013.pdf>

Lau, C.M., & Woodman, R. (1995). Understanding organizational change: A schematic perspective. *Academy of Management Journal*, 38(2), 537-554.

- Lauver, K. J., & Kristof-Brown, A. (2001). Distinguishing between Employees' Perceptions of Person–Job and Person–Organization Fit. *Journal of Vocational Behavior*, 59, 454–470.
- Law, K. S., Wong, C., & Mobley, W. H. 1998. Toward a taxonomy of multidimensional constructs. *Academy of Management Review*, 23, 741–755.
- Lawler, E. E., & Hall, D. T. (1970). Relationships of job characteristics to job involvement, satisfaction, and intrinsic motivation. *Journal of Applied Psychology*, 54, 305-312.
- Lawler, E. E., Hall, D.T., & Oldham, G.R. (1974). Organizational Climate: Relationship to Organizational Structure, Process and Performance. *Organizational Behavior and Human Performance*, 11(1), 139-155.
- Lawrence, P. R., & Lorch, J. W. (1969). *Developing organizations: Diagnosis and action*. Reading, MA: Addison-Wesley.
- Lerner, M., Unterman, M., & Oster, M. (2013). *Leveraging shared services to decrease costs, improve service levels and enhance controls*. The state of higher education in 2013: Pressures, changes and new priorities. Retrieved from <http://www.grantthornton.com/staticfiles/GTCom/Not-for-profit%20organizations/The%20state%20of%20higher%20education%20in%202013.pdf>
- Lewin, K. (1947). Group decision and social change. In T.M. Newcomb, E. L. Hartley, et al. (Eds.), *Readings in social psychology*. New York: Henry Holt.
- Litwin, G.H., Humphrey, J.W., & Wilson, T.B. (1978). Organizational climate: A proven tool for improving performance. In W.W. Burke (Ed.), *The cutting edge: Current*

theory and practice in organization development. La Jolla, CA: University Associates.

Litwin, G., & Stringer, R. (1968). *Motivation and organizational climate*. Boston: Harvard University Press.

Locke, E.A., Shaw, K.N., Saari, L.M., & Latham, G.P. (1981). Goal-setting and task performance. *Psychological Bulletin*, 90, 125-152.

Lovett, C., Newman, F., & Couturier, L. (2002). Tough times for colleges demand structural changes...and a new compact with their states. *Chronicle of Higher Education*, 49(8), B12.

Lutigheid, A., & Rathod, S. (2005). *Questionnaire Length and Response Quality: Myth or Reality?* Stamford, CT: Survey Sampling International.

Luthans, F. (1988). Successful vs. effective real managers. *The Academy of Management Executive*, Vol. II(2), 127-132.

Management Consulting Partners. (n.d.). *Streamlining campus processes: Avoiding the top 12 10 mistakes*. Retrieved from <http://www.mcpartnersllc.com/download/Streamlining%20Campus%20Processes.pdf>

Management Consulting Partners. (2009). *Shared services opportunities in higher education*. Retrieved from <http://www.mcpartnersllc.com/download/Shared%20Services%20Opportunities.pdf>

- McDonald, M. (2013). Moody's Cuts 2013 Higher Education Outlook to Negative. *Bloomberg*. Retrieved from <http://www.bloomberg.com/news/2013-01-16/moody-s-cuts-2013-higher-education-outlook-to-negative.html>
- Mergy, L., & Records, P. (2001). Unlocking shareholder value from shared services. *Strategy & Leadership*, 29(3), 19–22.
- Metnick, D., Condell, G., & Howard, M. (2012). *Achieving New Efficiencies in Higher Education*. Retrieved from <http://microsites.accenture.com/SiteCollectionDocuments/PDF/Accenture-Achieving-New-Efficiencies-in-Higher-Education.pdf>
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: formal structure as myth and ceremony. *American Journal of Sociology*, 83, 340-363.
- Mintzberg, H. (1973). *The Nature of Managerial Work*, New York: Harper & Row.
- Mowday, R. T., Porter, L. W., & Steers, R. M. (1982). *Employee-organization linkages: The psychology of commitment, absenteeism, and turnover*. New York: Academic Press.
- Nadler, D.A., & Tushman, M.L. (1977). A diagnostic model for organization behavior. In J.R. Hackman, E.E. Lawler, & L.W. Porter (Eds.), *Perspectives on behavior in organizations*. New York: McGraw-Hill.
- NASCIO. (2006). *NASCIO's Survey on IT Consolidation & Shared Services in the States: A National Assessment*. Retrieved from <http://www.nascio.org/publications/documents/NASCIO-ITConsolidationMay2006.pdf>

- National Strategy for Higher Education to 2030. (2011). Retrieved from http://www.heai.ie/sites/default/files/national_strategy_for_higher_education_2030.pdf
- Noel-Levitz, (2009). *Six essentials-and six common mistakes-in cabinet-level strategic enrollment planning*. Retrieved from <https://www.noellevitz.com/papers-research-higher-education/2009/cabinet-level-strategic-enrollment-planning>
- Noel Levitz. (2014). *About noel levitz*. Retrieved from <https://www.noellevitz.com/about-noel-levitz>
- Noel Levitz. (2014). *National Student Satisfaction and Priorities Report*. Retrieved from https://www.noellevitz.com/documents/gated/Papers_and_Research/2014/2014_NationalStudentSatisfactionReport.pdf?code=
- Oftelie, A. M. (2009). *Shared services horizons of value: Leadership lessons on accelerating transformation to high performance*. Retrieved from http://community.lnwprogram.org/sites/default/files/Shared_Services_Horizons_of_Value.pdf
- Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management Review*, 16, 145-179.
- Oliver, G. (1997). Sustainable competitive advantage: Combining institutional and resource-based views. *Strategic Management Journal*, 18, 697-713.
- O'Reilly, K. (2010). *Service undone: A grounded theory of strategically constructed silos and their impact on customer-company interactions from the perspective of retail employees*. Retrieved from DigitalCommons@USU.

- Pascale, R., & Athos, A. (1981). *The art of Japanese management*. New York: Warner Books.
- Peters, T. (1988). Restoring American competitiveness: Looking for new models of organizations. *The Academy of Management Executive*, 2(2), 103-109.
- Pettigrew, A. (1990). Longitudinal field research on change: Theory and practice. *Organization Science*, 1(3), 267-292.
- Pfeffer, J. (1994). *Competitive advantage through people: Unleashing the power of the workforce*. Boston: Harvard Business School Press.
- Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations: A resource dependence perspective*. New York: Harper & Row.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.
- Porras, J., & Robertson, P.J. (1987). Organization development theory: A typology and evaluation. In R.W. Woodman & W.A. Pasmore (Eds.), *Research in organization development*, Greenwich, CT: JAI.
- Powell, W. (1998). *Institutional effects on organizational structure and performance*. In L.G. Zucker (Ed.), *Institutional Patterns and Organizations*. Cambridge: MA: Ballinger.
- Pratt, M.G., Rockmann, K. W., & Kaufmann, J.B. (2006). Constructing professional identity:
The role of work and identity learning cycles in the customization of identity among medical residents. *Academy of Management Journal*, 49, 235–262.

- Prescott, J. E. (1986). Environments as moderators of the relationship between strategy and performance. *Academy of Management Journal*, 29, 329-346.
- Qualtrics. (2013). *About us*. Retrieved from <http://qualtrics.com/>
- Rahman, A. A. (2005). Looking at shared services model for public sector. *New Straits Times Press, Berhad Business Times*, p. 7.
- Ramphal, R. (2013). A literature review on shared services. *African Journal of Business Management*, 7(1), 1-7.
- Reilly, P. (2000). *HR shared services and the realignment of HR*. Retrieved from https://www.ewin.nhs.uk/storage/northwest/files/News/HR_Shared_Services/Appendix_8_Shared_Services_the_Realignment_of_HR_IES.pdf
- Reynolds, G. (2012). *What Comes After the Higher Education Bubble*. Retrieved from <http://washingtonexaminer.com/sunday-reflection-what-comes-after-the-higher-education-bubble/article/572421>
- Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects of job performance. *Academy of Management Journal*, 53(3), 617-635.
- Roberts, A. O., Wergin, J. F., & Adam, B. E. (1993). Institutional approaches to the issues of reward and scholarship. *New Directions for Higher Education*, 81, 63-86
- Rothbard, N. P. (2001). Enriching or depleting? The dynamics of engagement in work and family roles. *Administrative Science Quarterly*, 46, 655–684.
- Russell, J. A., & Barrett, L. F. (1999). Core affect, prototypical emotional episodes, and other things called emotion: Dissecting the elephant. *Journal of Personality and Social Psychology*, 76, 805–819.

- Rust, R. T., & Zahorik, A.J. (1993). Customer satisfaction, customer retention, and market share. *Journal of Retailing*, 69(2), 193-215.
- Salkind, N. J. (2011). *Statistics for people who (think they) hate statistics*. (4th ed.). Thousand Oaks, CA: Sage.
- Sanburn, J. (2012). *Higher-Education Poll*. *TIME*. Retrieved from <http://nation.time.com/2012/10/18/higher-education-poll/>
- Schein, E. (1987). *Process consultation: Lessons for managers and consultants*. Reading, MA: Addison Wesley Publishing Company.
- Schmidt, J. (1997). Breaking down fiefdoms. *Management Review*, 86(1), 45-49.
- Schneider, B., & Hall, D. (1972). Toward specifying the concept of work climate: a study of Roman Catholic diocesan priests. *Journal of Applied Psychology*, 56, 447-455.
- Schneider, B., White, S.S., & Paul, M. C. (1998). Linking service climate and customer perceptions of service quality: Test of a causal model. *Journal of Applied Psychology*, 83(2), 150-163.
- Schulman, D., Harmer, M., Dunleavy, J., & Lusk, J. (1999) *Shared Services: Adding Value to the Business Units*. New York: John Wiley & Sons.
- Schulz, S., & Lucido, J. (2011). What enrollment management structures reveal about institutional priorities. *Enrollment Management Journal*, Winter (2011), 12-43.
- Schumacker, R. E., & Lomax, R. G. (2010). *A beginner's guide to structural equation modeling*. (3rd ed.). New York: Routledge.
- Scott, W. R. (1995). *Institutions and organizations*. Thousand Oaks, CA: Sage.
- Scott, W. R. (2001). *Institutions and organizations*. (2nd ed.). Thousand Oaks, CA: Sage.

- Scott, W. R., & Meyer, J. W. (1983). *The organization of societal sectors' in organizational environments: Ritual and rationality*. John W. Meyer and W. Richard Scott (Eds.), Beverly Hills, CA: Sage.
- Scully, J., & Levin, B. (2010). *HR Shared Services Is Hot and Getting Hotter. Employment Relations Today*. 23-30.
- Selingo, J. (2012). Fixing College. *The New York Times*. Retrieved from www.nytimes.com/2012/06/26/opinion/fixing-college-through-lower-costs-and-better-technology.html
- Settoon, R.P., Bennett, N., & Liden, R. C. (1996). Social exchange in organizations: Perceived organizational support, leader-member exchange, and employee reciprocity. *Journal of Applied Psychology*, 81, 219–227.
- Shah, B. (1998). Shared services: Is it for you? *Industrial Management*, September-October, 4-8.
- Shamir, B., House, R. J., & Arthur, M.B. (1993). The motivational effect of charismatic leadership: A self-concept based theory. *Organization Science*, 4, 577–594.
- Shell. (2013). *About shell*. Retrieved from <http://www.shell.com/global/aboutshell/careers.html>
- Sherman, J. D., & Smith, H. L. (1984). The influence of organizational structure on intrinsic versus extrinsic motivation. *Academy of Management Journal*, 27(4), 877-885.
- Short, D. C., Kormanik, M. B., & Ruona, W. E. A. (2009). Bridging the gap: Scholar-practitioners in human resource development. *Advances in Developing Human Resources*, 11(4), 415-547.

- Smith, B. D. (2011). A case study of organizational change: College restructuring in response to mandated department eliminations. Retrieved from UNLV Theses/Dissertations/Professional Papers/Capstones. Paper 1250.
- Smith, J.E., Carson, J. P., & Alexander, R. A. (1984). Leadership: It can make a difference, *Academy of Management Journal*, 27, 765-776.
- Stevens, J. P. (2009). *Applied multivariate statistics for the social sciences*. (5th ed.). New York: Routledge.
- Stone, K. (2010). *Relationships between organizational performance and change factors and manufacturing firms' leanness*. Retrieved from ProQuest, UMI Dissertations Publishing. (3419114).
- Stone, K. (2012). *Burke-Litwin Organizational Assessment Survey: Reliability and validity*. Paper presented at the 2013 Academy of Human Resource Development International Conference in the Americas: Washington, D.C.
- Stony Brook University Senate Administrative Review Committee. (2012). *Report on Shared Services*. Retrieved from <http://www.stonybrook.edu/senatecas/pdf/SharedServices-Report-Final.pdf>
- Stoyanoff, D. (2012). *Examining success factors related to ERP implementations in higher education shared services projects*. Retrieved from UMI Dissertation Publishing (3549147).
- Su, N., Akkiraju, R., Nayak, N., & Goodwin, R. (2009). Shared services transformation: Conceptualization and valuation from the perspective of real options. *Decision Sciences*, 40(3), 381-402.

- Swanson, R.A., & Holton, E.F. (2005). *Research in organizations: Foundations and methods of inquiry*. San Francisco: Berrett-Koehler Publishers, Inc.
- Tagiuri, R., & Litwin, G. H. (1968). *Organizational climate*. Boston: Division of Research, Graduate School of Business Administration, Harvard University.
- Taylor, A., & Koch, A. M. (1996). The cultural context for effective strategy. *New Directions for Higher Education*, 94, 83–86.
- The Carnegie Classification of Institutions of Higher Education. (2015). *About Carnegie Classification*. Retrieved from <http://carnegieclassifications.iu.edu/>
- The University of New Orleans. (2013). *Privateer enrollment center*. Retrieved from <http://www.uno.edu/pec/>
- The University of Tennessee. (2013). *Enrollment services*. Retrieved from <http://web.utk.edu/~enrollsv/>
- The University of Texas. (2013). *UT shared services plan*. Retrieved from <http://www.utexas.edu/sites/default/files/UT-Austin-SS-Draft-Plan.pdf>
- The University of Texas at San Antonio. (2013). *Financial aid and enrollment services*. Retrieved from <http://utsa.edu/financialaid/>
- Trends in Student Aid. (2012). *Trends in student aid*. Retrieved from <http://trends.collegeboard.org/student-aid>
- Tziner, A. (1987). Congruency issue retested using Fineman's achievement climate notion. *Journal of Social Behavior and Personality*, 2(1), 63-78.
- Ulbrich, F. (2003). *Introducing a research project on shared services in governmental agencies*. 17th Scandinavian Academy of Management (NFF) Conference. Reykjavik, Iceland.

- Ulrich, D. (1995). Shared services: From vogue to value. *Human Resource Planning*, 18/3, 12-23.
- Ulrich, D. (1997). *Human resource champions*. Boston: Harvard Business School Press.
- University of Minnesota. (2013). *One stop student services*. Retrieved from <https://onestop.umn.edu/>
- U.S. Department of the Treasury & U.S. Department of Education. (2012). *New Report From Treasury, Education Departments: The Economic Case for Higher Education*. Retrieved from http://www.treasury.gov/press-center/press-releases/Documents/The%20Economics%20of%20Higher%20Education_REPORT%20CLEAN.pdf
- Van de Ven, A. H., & Poole, M. S. (1995). Explaining development and change in organizations. *Academy of Management Review*, 20(3), 510–540.
- van Knippenberg, D., van Knippenberg, B., De Cremer, D., & Hogg, M. A. (2004). Leadership, self, and identity: A review and research agenda. *Leadership Quarterly*, 15, 825–856.
- Vitale, D.C., Armenakis, A.A., & Field, H.S. (2008). Integrating qualitative and quantitative methods for organizational diagnosis possible priming effects? *Journal of Mixed Methods Research*, 2(1), 87-105.
- Vroom, V.H. (1964). *Work and motivation*. New York: Wiley.
- W. Warner Burke Associates, Inc.. (n.d.). *The Burke-Litwin organizational assessment survey*. Pelham, NY.
- Wagenaar, R. W. (2006). Governance of shared service centers in public administration:

- Dilemma's and trade-offs. *Proceedings of the 7th International Conference on Electronic Commerce*, Fredericton, Canada, 354–363.
- Walsh, P., McGregor-Lowndes, M., & Newton, C. J. (2008). Shared services: Lessons from the public and private sectors for the nonprofit sector. *Australian Journal of Public Administration*, 67(2), 200-212.
- Walumbwa, F. O., Avolio, B. J., & Zhu, W. (2008). How transformational leadership weaves its influence on individual job performance: The role of identification and efficacy beliefs. *Personnel Psychology*, 61(4), 793-825.
- Wang, S., & Wang, H. (2007). Shared services beyond sourcing the back offices: Organizational design. *Human Systems Management*, 26(4), 281-290.
- Weiner, B. (1972). *Theories of motivation*. Chicago, IL.: Rand-McNally.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92, 548-573.
- Weisbord, M. R. (197). Organizational diagnosis: Six places to look for trouble with or without a theory. *Group and Organization Studies*, 1, 430-447.
- Western Interstate Commission for Higher Education (WICHE). (2012). *Knocking at the College Door*. Retrieved from <http://www.wiche.edu/info/publications/knocking-8th/knocking-8th.pdf>
- Woodman, R.W. (1989). Organizational change and development: New areas for inquiry and action. *Journal of Management*, 15, 205-228.
- Woodman, R.W., & King, D.C. (1978). Organizational climate: Science or folklore? *The Academy of Management Review*, 3(4), 816-826.
- Yale University. (2013). *Yale shared services*. Retrieved from <http://yss.yale.edu/>

- Yuan, K. H., & Bentler, P. M. (1997). Mean and covariance structure analysis: Theoretical and practical improvements. *Journal of the American Statistical Association*, 92, 767-774.
- Zajac, E., & Kraatz, M. (1993). A diametric forces model of strategic change: Assessing the antecedents and consequences of restructuring in the higher education industry. *Strategic Management Journal*, 14, 83-102.
- Zucker, L. G. (1988). *Where do institutional patterns come from? Organizations as actors in social systems' in institutional patterns and organizations: Culture and environment*. Lynne G. Zucker (ed.). Cambridge, MA: Ballinger.

Appendix A: Request to Use the Burke-Litwin Organizational Assessment Survey

From: Burke, Warner [mailto:burke1@exchange.tc.columbia.edu]
Sent: Tuesday, January 21, 2014 11:35 AM
To: Rosemary Cooper <rcooper@uttyler.edu>
Subject: Re: Requesting use of the Burke-Litwin Organizational Assessment Survey

Dear Ms Cooper:

You have my permission to use the B-L Organizational Assessment Survey. Best wishes for a successful study.

Kind regards,

W. Warner Burke
W. Warner Burke, PhD
Edward Lee Thorndike Professor of Psychology and Education
220 Zankel Hall
Box 24 Teachers College, Columbia University
525 West 120th Street
New York, NY 10027
(212) 678-3831

On Tue, Jan 21, 2014 at 12:10 PM, Rosemary Cooper <rcooper@uttyler.edu> wrote:

Dr. Burke:

My name is Rosemary Cooper and I am a current PhD student in the Human Resource Development program here at The University of Texas at Tyler, under the direction of Dr. Jerry Gilley.

I have chosen to study shared services models in the context of higher education enrollment management divisions and their impact on individual performance. As part of my study, I will be using the Burke-Litwin Model of Organizational Performance and Change and hope to use the Burke-Litwin Organizational Assessment Survey as my survey instrument. I am currently in the draft phase of my proposal.

I have spoken to Dr. Jerry Gilley and my classmate, Gayle Haecker, and both encouraged me to contact you directly to ask for permission to use your instrument. Gayle is currently working on formulating her final proposal and is using your survey instrument as part of her research.

Thank you so much for your consideration! If you need any additional information, please let me know and I would be happy to provide that.

Thanks so much for your time and I look forward to hearing from you soon.

Respectfully,

Rosemary Cooper, M.P.A.

Director

Office of Enrollment Services

The University of Texas at Tyler

[903.566.7004](tel:903.566.7004)

Appendix B: Organizational Assessment Survey

Organizational Assessment Survey

Thank you for your willingness to complete the **Organizational Assessment Survey**.

The purpose of this research is to examine the shared services (Enrollment Services) unit within higher education institutions and the impact of the unique organizational structure on employee motivation.

Your willingness to share your perception of key performance metrics within your organization is essential to this study. The survey covers a wide variety of performance measures and should take approximately 10 minutes to complete.

Your participation in this survey is extremely important and voluntary. **No** information which could be used for personal identification either by your employer or the researcher will be gathered as part of this survey. Your responses are completely anonymous. If at any time during the survey you wish to discontinue your participation, there will be no penalty should you choose to exit. Please complete the survey by July 27, 2015.

This research has been approved by The University of Texas at Tyler's Institutional Review Board, and is anticipated to generate no adverse impact for participants. The survey data will be kept at a secure location on the University campus for three years. The data will be used for scholarly purposes only. If you have any questions regarding this survey, please contact the principle investigator Rosemary Cooper at 903-566-7004 or email at rcooper@uttyler.edu, or Gloria Duke at 903-566-7023 or email at gduke@uttyler.edu.

Thank You for your time and participation. This research cannot be completed without **YOUR SUPPORT!** Your assistance with this research will benefit many organizations including your own. Please select the **AGREE** button below to continue on with this survey.

- ☐ AGREE
- ☐ DISAGREE

Organizational Assessment Survey

In this section, mission refers to the overall purpose of the organization, what it wants to achieve. The strategy is the means by which the organization intends to achieve its mission.

To what extent are employees clear about the organization's direction; i.e., its mission and strategy?

To a very
small extent

☐☐☐

To some
extent

☐☐☐

To a very
great extent

☐

To what extent do employees know who their target customers and markets are?

To a very
small extent

☐☐☐

To some
extent

☐☐☐

To a very
great extent

☐

To what extent can employees identify the primary products and/or services?

To a very
small extent

☐☐☐

To some
extent

☐☐☐

To a very
great extent

☐

To what extent do employees know the organization's geographic domains?

To a very
small extent

☐☐☐

To some
extent

☐☐☐

To a very
great extent

☐

Can employees describe the organization's core technologies (i.e., how its products and/or services are produced)?

To a very
small extent

☐☐☐

To some
extent

☐☐☐

To a very
great extent

☐

Do employees understand the organization's plans regarding survival, growth, and target levels of profitability?

To a very
small extent

☐☐☐

To some
extent

☐☐☐

To a very
great extent

☐

Can employee's articulate the organization's basic beliefs, values, and aspirations (i.e., key elements of the organization's philosophy)?

To a very
small extent

☐☐☐

To some
extent

☐☐☐

To a very
great extent

☐

Can employee's identify the organization's competitive strengths (i.e., how it differs from the competition)?

To a very
small extent

☐☐☐

To some
extent

☐☐☐

To a very
great extent

☐

Can employees articulate the organization's desired public image (i.e., how it works to be perceived)?

To a very
small extent

☐☐☐

To some
extent

☐☐☐

To a very
great extent

☐

How widely shared is the organization's strategy among employees (i.e., how widely is it communicated)?

Narrowly
communicated;
only certain
people know it

☐☐☐☐☐☐

Very widely
communicated;everyone
knows it

☐

How relevant do employees believe their day-to-day activities are to achieving the organization's strategy?

Not at all
relevant

☐☐☐☐☐☐

Highly
relevant

☐

Organizational Assessment Survey

The questions in this section ask for your perceptions of leadership. Leadership refers to the most senior executives in your organization.

To what extent do employees trust the leadership of the organization?

To a very
small extent

☐☐☐☐☐☐☐

To a very
great extent

To what extent do senior managers promote ethics and integrity in the organization (i.e., what the organization stands for, its purpose, its standing in the larger community?)

To a very
small extent

☐☐☐☐☐☐☐

To a very
great extent

Are the senior managers of the organization perceived as strongly and unequivocally supporting the mission and strategy?

Substantial
doubts about
leadership's
commitment

☐☐☐☐☐☐☐

Leadership
is perceived
as totally
committed

To what extent do the senior managers of the organization make an effort to keep in personal touch with staff at your level?

To a very
small extent

☐☐☐☐☐☐☐

To a very
great extent

Is excellent leadership valued in your organization?

There is
little
attention
given to the
value of
excellent
leadership

☐☐☐☐☐☐☐

There is a
high degree
of attention
given to the
value of
excellent
leadership

Do the senior managers of the organization inspire people to achieve the mission?

Leadership
is not
inspirational

☐☐☐☐☐☐

Leadership
is very
inspirational

☐

To what extent does the behavior of senior managers demonstrate their beliefs in the values needed for success?

To a very
small extent

☐☐☐☐☐☐

To a very
great extent

☐

Organizational Assessment Survey

The questions in this section refer to the structure of your organization; how it is currently organized to accomplish its mission and strategy.

To what extent does the organization's structure help different departments work together effectively?

To a very
small extent

☐☐☐☐☐☐

To a very
great extent

☐

Does the structure support the accomplishment of the organization's mission and strategy?

Structure
hinders mission
and strategy
accomplishment

☐☐☐☐☐☐

Structure
supports
mission and
strategy
accomplishment

☐

To what extent do managers give people the authority they need to accomplish their work effectively?

To a very
small extent

☐☐☐☐☐☐

To a very
great extent

☐

For managers in your organization, how would you characterize the breadth and depth of responsibilities they are expected to manage?

Too limited

☐☐☐

About right

☐☐☐

Too much

☐

Organizational Assessment Survey

The questions in this section refer to the management practices exhibited by your manager on a daily basis. Your manager refers to whom you directly report; your supervisor.

To what extent does your manager act in ways that reflect a concern for people?

To a very
small extent

☐☐☐

To some
extent

☐☐☐

To a very
great extent

☐

To what extent does your manager inspire and motivate people?

To a very
small extent

☐☐☐

To some
extent

☐☐☐

To a very
great extent

☐

To what extent does your manager encourage autonomy?

To a very
small extent

☐☐☐

To some
extent

☐☐☐

To a very
great extent

☐

To what extent does your manager recognize innovation?

To a very
small extent

☐☐☐

To some
extent

☐☐☐

To a very
great extent

☐

To what extent does your manager demonstrate a commitment to safety?

To a very
small extent

☐☐☐

To some
extent

☐☐☐

To a very
great extent

☐

To what extent does your manager hold people accountable for their actions?

To a very
small extent

☐☐☐

To some
extent

☐☐☐

To a very
great extent

☐

To what extent does your manager demonstrate a concern for the customer?

To a very
small extent

☐☐☐

To some
extent

☐☐☐

To a very
great extent

☐

To what extent does your manager demonstrate respect for people?

To a very
small extent

☐☐☐

To some
extent

☐☐☐

To a very
great extent

☐

To what extent does your manager encourage participation?

To a very
small extent

☐☐☐

To some
extent

☐☐☐

To a very
great extent

☐

To what extent does your manager engage in realistic budgeting?

To a very
small extent

☐☐☐

To some
extent

☐☐☐

To a very
great extent

☐

To what extent does your manager encourage communication up, down, and across?

To a very
small extent

☐☐☐

To some
extent

☐☐☐

To a very
great extent

☐

To what extent does your manager promote career development of employees?

To a very
small extent

☐☐☐

To some
extent

☐☐☐

To a very
great extent

☐

To what extent does your manager demonstrate knowledge and expertise in his/her area of the business?

To a very
small extent

☐☐☐

To some
extent

☐☐☐

To a very
great extent

☐

Organizational Assessment Survey

The questions in this section deal with your perceptions of the level of teamwork exhibited in your work group. Throughout this section, work group refers to peers and colleagues with whom you work on a day-to-day basis.

How clear are work group members about what is expected of them, their responsibilities, roles, and goals?

Very
unclear

☐☐☐☐☐☐

Very clear

☐

To what extent are work group members involved in making decisions that directly affect their work?

To a very
small extent

☐☐☐☐☐☐

To a very
great extent

☐

Is there cooperation and teamwork between you and your colleagues?

Work group
members
work
individually,
there is little
cooperation
& teamwork

☐☐☐☐☐☐

Work group
members work
collaboratively,
cooperate to
get the job
done

☐

Is there trust and mutual respect among work group members?

Very little
trust and
mutual
respect

☐☐☐☐☐☐

High trust
and mutual
respect

☐

To what extent does your work group make good use of individual differences of style, approach, and skills?

To a very
small extent

☐☐☐☐☐☐

To a very
great extent

☐

Is there trust and mutual respect between your work group and other groups inside the organization?

Very little
trust and
mutual
respect

☐☐☐☐☐☐

High trust
and mutual
respect

☐

Do work group members recognize each other for doing good work?

Members
give little to
no
recognition
for others'
good work

☐☐☐☐☐☐

Members
give a great
deal of
recognition
for others'
good work

☐

Do work group members work at the highest possible standard?

Members
work to look
busy, not
much gets
accomplished

☐☐☐☐☐☐

Members
work to
achieve
higher
levels of
performance

☐

Organizational Assessment Survey

The questions in this section refer to the extent to which employees' skills match the jobs they perform.

How challenged do you feel in your present job?

Not at all
challenged

☐☐☐☐☐☐

Highly
challenged

☐

To what extent do you believe your skills, knowledge, and experience appropriately fit the job you currently hold?

To a very
small extent

☐☐☐☐☐☐

To a very
great extent

☐

To what extent are the right people selected for promotion or assignment to projects in your organization?

To a very
small extent

☐☐☐☐☐☐

To a very
great extent

☐

Do employees feel they can request formal training and development?

Employees
are afraid to
ask for
training and
development

☐☐☐☐☐☐

Employees
feel they can
openly
request
more skill
building and
training

☐

Organizational Assessment Survey

The questions in this section refer to the existing level of employee motivation to perform effectively in their jobs.

How would you characterize employee morale?

Very low,
people feel
discouraged,
frustrated,
and anxious

Very high,
there is a
positive
sense of
commitment,
confidence,
and
motivation

☐ ☐ ☐ ☐ ☐ ☐ ☐

To what extent do you feel encouraged to reach higher levels and standards of performance in your work?

To a very
small extent

To a very
great extent

☐ ☐ ☐ ☐ ☐ ☐ ☐

To what extent do you feel your total motivational energies are being drawn on to support the organization's mission and purpose?

Have to
work to
keep myself
motivated

Total
motivation
&
commitment

☐ ☐ ☐ ☐ ☐ ☐ ☐

To what extent are other employees in your organization motivated to do what is needed to achieve the organization's mission and purpose?

Employees
have a low
level of
motivation

Employees
are highly
motivated

☐ ☐ ☐ ☐ ☐ ☐ ☐

Organizational Assessment Survey

The questions in this section refer to how you involve yourself physically, mentally, and emotionally at work.

I work with intensity on my job.

Strongly
Disagree

☐

Disagree

☐

Somewhat
Disagree

☐

Neither
Agree nor
Disagree

☐

Somewhat
Agree

☐

Agree

☐

Strongly
Agree

☐

I exert my full effort to my job.

Strongly
Disagree

☐

Disagree

☐

Somewhat
Disagree

☐

Neither
Agree nor
Disagree

☐

Somewhat
Agree

☐

Agree

☐

Strongly
Agree

☐

I devote a lot of energy to my job.

Strongly
Disagree

☐

Disagree

☐

Somewhat
Disagree

☐

Neither
Agree nor
Disagree

☐

Somewhat
Agree

☐

Agree

☐

Strongly
Agree

☐

I try my hardest to perform well on my job.

Strongly
Disagree

☐

Disagree

☐

Somewhat
Disagree

☐

Neither
Agree nor
Disagree

☐

Somewhat
Agree

☐

Agree

☐

Strongly
Agree

☐

I strive as hard as I can to complete my job.

Strongly
Disagree

☐

Disagree

☐

Somewhat
Disagree

☐

Neither
Agree nor
Disagree

☐

Somewhat
Agree

☐

Agree

☐

Strongly
Agree

☐

I exert a lot of energy on my job.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I am enthusiastic about my job.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I feel energetic at my job.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I am interested in my job.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I am proud of my job.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I feel positive about my job.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I am excited about my job.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

At work, my mind is focused on my job.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

At work, I pay a lot of attention to my job.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

At work, I focus a great deal of attention on my job.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

At work, I am absorbed by my job.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

At work, I concentrate on my job.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

At work, I devote a lot of attention to my job.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Organizational Assessment Survey

You are almost finished!

THANK YOU! Please take just one more moment to tell us a little bit about you.

What is the name of your institution?

- ☐ Arizona State University
- ☐ Auburn University
- ☐ Boise State University
- ☐ California State University Long Beach
- ☐ California State University Stanislaus
- ☐ Chicago State University
- ☐ Cleveland State University
- ☐ Columbus State University
- ☐ East Carolina University
- ☐ East Stroudsburg University
- ☐ East Tennessee State University
- ☐ Eastern Washington University
- ☐ Fayetteville State University
- ☐ Ferris State University
- ☐ Florida International University
- ☐ Frostburg State University
- ☐ Georgia State University
- ☐ Indiana State University
- ☐ Indiana University Bloomington
- ☐ Indiana University South Bend
- ☐ Iowa State University
- ☐ Kentucky State University

- ☐ Louisiana State University Shreveport
- ☐ Miami University
- ☐ Middle Tennessee State University
- ☐ Missouri Southern University
- ☐ Montana State University Dartmouth
- ☐ Morehead State University
- ☐ Nicholls State University
- ☐ North Carolina State University
- ☐ Salem State University
- ☐ San Jose State University
- ☐ Southern Oregon University
- ☐ Tarleton State University
- ☐ Texas A & M University - Commerce
- ☐ Texas A & M University - Kingsville
- ☐ Texas A & M University - San Antonio
- ☐ Texas Woman's University - Dallas
- ☐ The Ohio State University
- ☐ The University of Texas Pan American
- ☐ The University of Texas at Brownsville
- ☐ The University of Texas at El Paso
- ☐ The University of Texas at San Antonio
- ☐ The University of Texas at Tyler
- ☐ The University of Texas Medical Branch
- ☐ Troy State University
- ☐ University of Alabama Birmingham
- ☐ University of Alaska Anchorage
- ☐ University of Arkansas
- ☐ University of California Bakersfield
- ☐ University of California Merced
- ☐ University of California Riverside
- ☐ University of California Santa Barbara
- ☐ University of Central Florida
- ☐ University of Central Missouri
- ☐ University of Cincinnati
- ☐ University of Central Oklahoma
- ☐ University of Delaware
- ☐ University of Houston Clear Lake

- ☐ University of Main at Augusta
- ☐ University of Illinois at Chicago
- ☐ University of Louisiana Monroe
- ☐ University of Massachusetts Dartmouth
- ☐ University of Memphis
- ☐ University of Michigan - Dearborn
- ☐ University of Minnesota - Duluth
- ☐ University of Minnesota - Twin Cities
- ☐ University of Nebraska at Omaha
- ☐ University of Nevada - Reno
- ☐ University of Nevada Las Vegas
- ☐ University of New Orleans
- ☐ University of North Dakota
- ☐ University of North Florida
- ☐ University of North Texas Health Science Center
- ☐ University of Rhode Island
- ☐ University of South Alabama
- ☐ University of Tennessee
- ☐ University of Tennessee Chattanooga
- ☐ University of Toledo
- ☐ University of Washington - Tacoma
- ☐ University of West Florida
- ☐ University of West Georgia
- ☐ University of Wisconsin Green Bay
- ☐ University of Wisconsin Platteville
- ☐ University of Wisconsin Stout
- ☐ Valley City State University
- ☐ Virginia Commonwealth University
- ☐ Wayne State University
- ☐ Western Carolina University
- ☐ Western Connecticut State University
- ☐ Western Michigan University
- ☐ Wichita State University
- ☐ Winston-Salem State University
- ☐ Other

What is your gender?

- ☐ Female
- ☐ Male

What is your age?

- ☐ 18-33
- ☐ 34-49
- ☐ 50-68
- ☐ 69 >

What is your level of education (highest degree awarded)?

- ☐ Less than High School
- ☐ High School
- ☐ Technical School
- ☐ Bachelor's or equivalent
- ☐ Master's Degree
- ☐ PhD, EdD, JD, MD

What is your organizational level?

- ☐ Entry Level/Front Line Personnel
- ☐ Middle Management
- ☐ Manager/Director
- ☐ Senior Administrator (Assistant Vice President, Vice President, Vice Chancellor)

What is your income level?

- ☐ Less than \$25,000
- ☐ \$25,000 to \$34,999
- ☐ \$35,000 to \$49,999
- ☐ \$50,000 to \$74,999
- ☐ \$75,000 to \$99,999
- ☐ \$100,000 to \$149,999
- ☐ \$150,000 or more

What is the size of your organization?

- ☐ < 1000 full-time students
- ☐ 1000 - 3000 full-time students
- ☐ 3001 - 10000 full-time students
- ☐ 10001 > full-time students

How many years have you worked in higher education?

- ☐ 1-5
- ☐ 6-10
- ☐ 11-15
- ☐ 16-20
- ☐ 21 >

How long has your unit or department been in place?

- ☐ Less than 1 year
- ☐ 1 - 3 years
- ☐ 4 - 6
- ☐ 7 >

How many years have you worked in your current unit or department?

- ☐ Less than 1 year
- ☐ 1 - 3 years
- ☐ 4 - 6
- ☐ 7 >

How many employees work in your unit or department?

- ☐ 10 or less
- ☐ 11-20
- ☐ 20-30
- ☐ 31 >

Organizational Assessment Survey

THANK YOU for your willingness to share your perception of key performance metrics within your organization! Your feedback is appreciated and essential to this study.

Appendix C: Institutional Review Board Study Approval



THE UNIVERSITY OF TEXAS AT TYLER
3900 University Blvd. • Tyler, TX 75799 • 903.565.5774 • FAX: 903.565.5858

Office of Research and
Technology Transfer

Institutional Review Board

March 20, 2015

Dear Ms. Cooper,

Your request to conduct the study: *The Shared Services Organizational Model in Higher Education Enrollment Management: The Application of the Transactional Components of the Burke-Litwin Model of Organizational Performance and Change and the Moderating Effect of Employee Engagement on Individual Motivation*, IRB# SP2015-71, has been approved by The University of Texas at Tyler Institutional Review Board as a study exempt from further IRB review. This approval includes a waiver of signed, written informed consent. In addition, please ensure that any research assistants are knowledgeable about research ethics and confidentiality, and any co-investigators have completed human protection training within the past three years, and have forwarded their certificates to the IRB office (G. Duke).

Please review the UT Tyler IRB Principal Investigator Responsibilities, and acknowledge your understanding of these responsibilities and the following through return of this email to the IRB Chair within one week after receipt of this approval letter:

- Prompt reporting to the UT Tyler IRB of any proposed changes to this research activity
- **Prompt reporting to the UT Tyler IRB and academic department administration will be done of any unanticipated problems involving risks to subjects or others**
- Suspension or termination of approval may be done if there is evidence of any serious or continuing noncompliance with Federal Regulations or any aberrations in original proposal.
- Any change in proposal procedures must be promptly reported to the IRB prior to implementing any changes except when necessary to eliminate apparent immediate hazards to the subject.

Best of luck in your research, and do not hesitate to contact me if you need any further assistance.

Sincerely,

Gloria Duke, PhD, RN

Gloria Duke, PhD, RN
Chair, UT Tyler IRB