University of Central Florida STARS

Electronic Theses and Dissertations

2014

An Examination of Job Analysis: Developing Interdisciplinary Strategies in Human Resource Management Facilitative of Mitigating Propensities of Teacher Attrition

Julio DeVere University of Central Florida

Part of the Education Commons, and the Human Resources Management Commons Find similar works at: https://stars.library.ucf.edu/etd University of Central Florida Libraries http://library.ucf.edu

This Masters Thesis (Open Access) is brought to you for free and open access by STARS. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of STARS. For more information, please contact STARS@ucf.edu.

STARS Citation

DeVere, Julio, "An Examination of Job Analysis: Developing Interdisciplinary Strategies in Human Resource Management Facilitative of Mitigating Propensities of Teacher Attrition" (2014). *Electronic Theses and Dissertations*. 4588. https://stars.library.ucf.edu/etd/4588

AN EXAMINATION OF JOB ANALYSIS: DEVELOPING INTERDISCIPLINARY STRATEGIES IN HUMAN RESOURCE MANAGEMENT FACILITATIVE OF MITIGATING PROPENSITIES OF TEACHER ATTRITION

by

JULIO ANDRES DEVERE B.A. University of Central Florida, 2010

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science in the Department of Interdisciplinary Studies in the College of Graduate Studies at the University of Central Florida Orlando, Florida

Fall Term 2014

Major Professor: Robert Folger

© 2014 Julio De Vere

ABSTRACT

Despite repeated attempts by school administrators, policymakers and researchers to diagnose and correct rising occurrences of teacher turnover, there has been little change in the actual efforts to retain teachers in academy organizations. In response, this study was conducted to describe process constraints within the academy organization that are responsible for managing teacher turnover. To provide a description of current teacher retention efforts by school administrators, a survey instrument was administered to school teachers in the State of Florida. The population sample was dispersed throughout the entire state and closely reflected the demographics of Florida school teachers.

The survey addressed two issues: Whether or not there is a consistent effort by school administrators to gauge a teacher's desire to remain in their current position and whether or not the teachers perceive related administration decisions to be fair. To describe perceptions of fairness, a two-prong model was used to measure perceptions of Voice and Equity. Of the 215 respondents, only about 25 percent were administered a survey within the last year that gauges their desire to remain in their current position. Of these respondents who were given a retention survey by their administrators, results were mixed, with only about half of all respondents leaning towards a favorable perception of fairness. The results indicate that there is a logical need for process improvement within the administration of academy organizations before teacher turnover could be managed effectively.

iii

ACKNOWLEDGMENTS

This thesis was only made possible by the generous support of many kind souls. I would first like to express gratitude to my all-star advisory committee:

Dr. Robert Folger, thank you for your unwavering support over the years both as a professor and a thesis adviser. Your priceless lessons in ethics, negotiations and organizational justice have not only made me a more effective manager, but have echoed to also improve the immediate lives of those under my leadership.

Dr. Valerie Storey, thank you for being such a great role model, and for graciously guiding me through this process over the years. I am aspiring to one day be an educational leader, so your words are – and always will be – gold to me.

Dr. Thomas Fisher, thank you for teaching me about the fine difference between a leader and an administrator; this advice will guide me for many years to come.

I would also like to give special thanks to Dr. Mary Ann and Mr. Randy Eastep, Dr. Leslie Lieberman, Dr. Walter Doherty, Dr. Michael Hampton, Mr. Pete Wallace, and Dr. Dan Ezell for their support resonating over many years.

This publication is dedicated to Dr. Thomas Greenhaw. Thanks for being there.

LIST OF FIGURES	viii
LIST OF TABLES	ix
CHAPTER ONE: INTRODUCTION	1
A Historical Perspective	1
A Socio-Political Perspective	3
Problem with Teacher Attrition in the U.S	6
Purpose of this Investigation	6
Research Questions	7
Assumptions	8
Limitations	9
CHAPTER TWO: LITERATURE REVIEW	
Introduction	
Section 1: A Theoretical Foundation	
Hackman & Oldham's Job Characteristics Model	
Voice and Referent Cognitions Theory (RCT)	
Grounded Theory	
Job Embeddedness Theory	
Human Capital Theory	
Holland's Theory of Vocational Choice	
Maslach's Burnout Inventory	
McGregor's Theory X and Theory Y	
Equity Theory	
Self-Actualization and the ERG Model	
Reinforcement Theory	

TABLE OF CONTENTS

Herzberg's Motivation-Hygiene Model18
Section 2: Job Analysis Themes19
Organizational Culture19
Horizontal Axis: The Process-Product Continuum
Vertical Axis: The Authoritarian-Laissez Faire Continuum
Quadrant 2: Bureaucratic Culture24
Quadrant 1: Corporate Culture25
Quadrant 3: Club Culture25
Quadrant 4: Adhocracy26
Working Conditions
29 Worker Mobility
2
Job Analysis Themes: Contextual Referencing in the Absence of Universal Models
Job Analysis Themes: Contextual Referencing in the Absence of Universal Models
Job Analysis Themes: Contextual Referencing in the Absence of Universal Models
Job Analysis Themes: Contextual Referencing in the Absence of Universal Models
Job Analysis Themes: Contextual Referencing in the Absence of Universal Models 31 Organizational Culture
Job Analysis Themes: Contextual Referencing in the Absence of Universal Models 31 Organizational Culture
Job Analysis Themes: Contextual Referencing in the Absence of Universal Models Organizational Culture
Job Analysis Themes: Contextual Referencing in the Absence of Universal Models 31 Organizational Culture
Job Analysis Themes: Contextual Referencing in the Absence of Universal Models 31 Organizational Culture 31 Working Conditions 33 Worker Mobility 35 Section 3: Definition of Terms 36 Section 4: Interrelating Established Management Strategy and Teacher Attrition42 Encumbrance Accounting and Breakage

Design	45
Subjects	45
Measures	47
Procedure	47
Ethical Considerations	48
CHAPTER FOUR: RESULTS	49

Administrative Retention Efforts	50
Perceptions of Fairness Following Retention Survey	51
Voice	51
Equity	53
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS	57

Sur	nmary	57
	nclusion	
Rec	commendations for Research	58
Rec	commendations for Practitioners	59
APPE	ENDIX A STATISTICAL TABLES	60

APPENDIX B	SURVEY	INSTRUMENT	ר 	 	62

APPENDIX D	IRB APPROVAL LETTER	72
		-

REFERENCES	4
------------	---

LIST OF FIGURES

Figure 1: Ideology in Contemporary Academies5
Figure 2: Organizational Culture Illustration
Figure 3: Organizational Culture Typology22
Figure 4: Working Conditions Illustration
Figure 5: Worker Mobility Illustration
Figure 6: Teacher Retention Survey50
Figure 7: Voice Perception
Figure 8: Voice Perception Middle Value53
Figure 9: Equity Perception
Figure 10: Equity Perception Middle Value55

LIST OF TABLES

Table 1: Retention Survey Participants	
Table 2: Response Scale	
Table 3: Voice Results	
Table 4 Equity Results	53

CHAPTER ONE: INTRODUCTION

A Historical Perspective

The historical roots of teaching in the United States are undoubtedly an extension of Western ideation. Between 3000 BC and 2000 BC, ancient Babylonians gathered in the valleys of the Tigris and Euphrates Rivers to capitalize on the availability of fertile soil and abundance of fresh water (Davidson, 1971, p. 49). An economy began to emerge and individuals often learned to survive by bartering various goods or services. In this type of environment, there was eventually a need to pass valuable information down from person to person so that the fragile societal orders would be maintained (p. 51). Laws, like Hammurabi's code, were carved in stone to remind Babylonians not to steal or otherwise harm their fellow citizens (p. 52). Other Babylonian knowledge was passed down verbally by generation; fathers taught their sons a trade and mothers taught their daughters domestic skills (Frost, 1947, p. 4).

Following the developments of Western History, the ancient Egyptians around 2000 BC, were influenced by trade with the Babylonians and neighboring tribes, like the Assyrians and Sumerians; except the Egyptians pioneered the practice of storing information on Papyrus, which is the predecessor to modern paper (Knight, 1940, p. 51). Again through trade, valuable knowledge on farming, mathematics, medicine and construction were passed from ancient Egypt to Greece; and then eventually from Greece to Rome, as the Roman elite often owned Greek scholars as servants or slaves (p. 57). Throughout cultural boundaries, paper enabled vast amounts of information to be

transferred along this ancient trade route and education became the mechanism necessary to transmit this knowledge (p. 61).

Throughout 14th century medieval Europe, the Black Plague was responsible for killing over a third of the European population (Thut, 1957, p. 83). This created a labor shortage, which ultimately led to the disintegration of feudalism and the emergence of a new market-based economy that thrived on the supply and demand of skilled labor (p. 85). It was in this type of economy that education began to take its new form, as it became more institutionalized and readily available to the working classes. Education was still costly and books were often very expensive, as they were typically handwritten by a calligrapher and bound in leatherback by tedious handiwork (Frost, 1947, p. 14). In the 1430s, however, Johannes Gutenberg invented the printing press, enabling books to reach massive new audiences; many beliefs that were traditionally taken for granted, like the existence of purgatory after death, were now being questioned as literacy rates began to climb (p. 16). It was at approximately this time that education became a social imperative in Western Society, extending to the English language (Boyd, 1965, p. 185).

In the colonial days of the United States, education was primarily based on the German model, with an emphasis being placed on Latin, mathematics, law, theology, and the Greek scholars (Gordon, 1989, p. 18). The Boston Latin School, opened on or around 1635, and was designed to teach advanced topics to its students in preparation for participation in the white-collar professions (Sherman, 1984, p. 126). Textbooks at this academy were routinely imported from England (p. 127). Teachers played a rather passive role in the school as it was assumed that the entry-level students were already taught the

rudiments of literacy at home. Schools like the Boston Latin School paved the way for compulsory education in the U.S., which started in Massachusetts in 1852 and became national practice by 1918 – through a sequence of legislation known as the Compulsory Attendance Laws (Ulich, 1968, p. 315). At around this same time, John Dewey, an outspoken pragmatist, began laying much of the philosophical groundwork for the constructivist ideology that currently dominates internal discourse in U.S. educational institutions and virtually defines the teacher's role in the classroom today (p. 322).

A Socio-Political Perspective

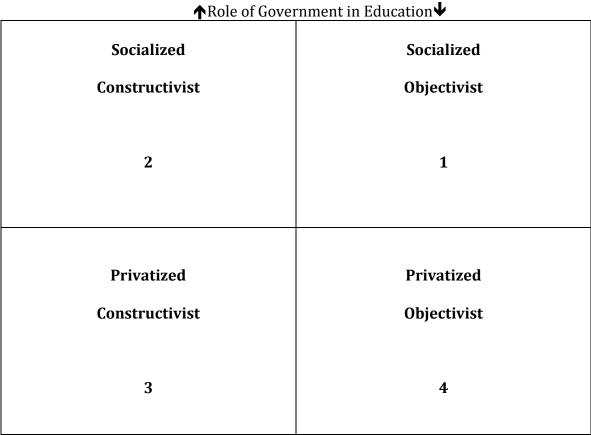
It is important to illustrate the conflicting worldviews in educational politics on the grounds that an increase in the institutionalization of ideology can lead to an increased vulnerability to groupthink and group-serving bias (Janis, 1972, p. 19). Regardless of ideological alignment, individuals who tend to psychologically identify themselves as being a member of an in-group, which in this case would be the dominant ideological discourse in the institutional setting, also tend to view their problems as existing beyond their control due to external factors (p. 25). In practical terms, this typically amounts to educational researchers imputing blame on out-groups with competing ideological narratives (Tajfel, 1970, p. 22); be it politicians at the local or national level (Flores, 2012, p. 30). Although there are hardly any objective viewpoints, this study seeks to remain vigilant about the competing philosophical narratives in educational research in an attempt to achieve solutions that are both syncretic and pragmatic. By focusing on management strategies that are effective regardless of the educational politics that currently dominate school

bureaucracies, this study also intends to preserve legitimacy by averting any dismissal as being categorically biased (Tajfel, 1974, p. 15).

One way to think of the worldviews in education is to imagine them to be on a continuum. When placed on a linear plane – one dimension of the continuum, in this case the vertical plane, could be imagined as the role of government in education. At the extreme top of the vertical continuum lie those who believe that the government should be responsible for educating the public in a system of socialized education; at the far bottom, however, lie those who believe that education should be privatized and the role of the government should be to stay out of education. Looking at the horizontal continuum of educational ideology, the far left represents the constructivist column, or those who believe that education must be self-discovered and based off of prior experiences (Vygotsky, 1962, p. 3).

Constructivist philosophy is consistent with the teachings of Lev Vygotsky, Jean Piaget and John Dewey – to name a few (Johnson, 2011, p. 6). The far right represents objectivists, or those who use the traditional didactic teaching model that centers all attention on the teacher (p. 7). Objectivism was driven to prominence by Ayn Rand and maintains that knowledge is objective and must be taught to independent minds with Aristotelian logic (Tajfel, 1974, p. 4). Constructivists who criticize objectivists usually maintain that knowledge is meaningless unless it is self-discovered; in contrast, objectivists usually criticize constructivists as having a penchant to "reinvent the wheel" (p. 5). In any case, movement on the continuum towards the center represents a moderate or syncretic

position: This area of the plane represents those who have mixed feelings and often have a limited acceptance of positions from any number of the competing ideologies.



←Educational Ideology→

Figure 1: Ideology in Contemporary Academies

Problem with Teacher Attrition in the U.S.

In recent years, high rates of teacher turnover have burdened the taxpayers and have degenerated the quality of education in the United States. Currently, about 40 percent of all new teachers won't be in the profession for more than five years (Boyd, 2008, p. 25). When teachers migrate away from the job, it generates a cost burden for their school system to recruit and train qualified replacements. Despite an annual U.S. cost of nearly 8 billion dollars associated with the expense of training and recruiting new teachers, there has been very little change in efforts to retain teachers (Paige, 2012, p. 30).

Purpose of this Investigation

The purpose of this study is to provide a practical basis for adjusting management practices in education by describing the existing trends that revolve around teacher retention efforts. Overall trends in organizational research have traditionally ignored the exigencies unique to managing the retention of public school teachers, choosing to focus more on politically-charged public policy issues rather than furthering the development of management strategies (Flores, 2012, p. 12). Furthermore, the top-down hierarchal structure of the academy organizational type is rarely critiqued as a probable origin of teacher attrition (Johnson, 2011, p. 9). If it could be understood as a matter of fact that the school administrators are the ones who hold the authority in the school organizations, then it also be expected that the school administrators are the ones responsible for mitigating the occurrence of teacher attrition (Kaiser, 2011, p. 5). By extension, a descriptive survey analysis of teacher retention efforts in academy organizational types would likely provide a

much more useful reference for school administrators; people who have a need to measure specific managerial choices, like cost vs. benefit in practical terms (Johnson, 2011, p. 14). For example, it would certainly be helpful to school principals if they knew how practical choices, like whether or not to invest time in job analyses for a retention survey vs. a teacher exit survey, could amount to dollars saved in teacher turnover.

Research Questions

To lessen the cost burden associated with teacher attrition, research will be conducted to answer the following questions:

- In contemporary academy settings (K-12), are the organizational leaders administering surveys that gauge their teachers' desire to remain in their current position?
- 2) What relationships can be described between administrative teacher retention efforts and teacher perceptions of fairness?
- 3) Are reliable employee retention processes institutionalized in contemporary academy (K-12) organizations?

Assumptions

This study assumes that the contributing factors leading to teacher turnover must be discovered via administrative job analysis prior to the creation of a reliable retention survey. Consequently, descriptive data collected will only be observed in terms of administrative efforts to retain teachers. This study also assumes that the majority of educational settings are academy cultures, which align with the bureaucratic organizational types (Allen, 2011, p. 59). Although the latest research supports the accuracy of these assumptions, much of the recent research on teacher attrition is embedded into the academy culture without questioning its limitations (Kaye, 1999, p. 17). It is also assumed that the teachers leaving the job are mostly teachers who work in traditional brick-and-mortar settings and not in an online environment. Most data currently available shows that turnover does not exist among online educators at the magnitude that persist among teachers in the classroom and this would render the population of online teachers largely irrelevant to the phenomenon of teacher attrition (Allen, 2011, p. 60).

Other issues, particularly perceptions of fairness may have an impact on the effectiveness that retention surveys have when diagnosing the magnitude of teacher attrition. This study assumes that teacher retention efforts are part of a larger notion of organizational justice, and therefore, can be affected by the teachers' perception of fairness (Tyler, 1987, p. 333). In this respect, perceptions of fairness are measured with the 2-prong model consisting of Voice and Equity. Voice is measured as the respondent's perception of

being included in administrative decisions following the administration of a retention survey and Equity is measured as one's perception of procedural justice (p. 334).

Limitations

There are limitations to this research that must be addressed. Due to the descriptive nature of this study, the survey instrument used to collect data is inherently prone to subjectivity (Patchen, 1977, p. 15). Although every attempt was made to insure the brevity and conciseness of the survey instrument by minimizing the questions to the target audience, the survey questions were predetermined. With due diligence to this limitation, special attention has been given to the contextual basis of the survey questions that compared descriptions from the survey instruments to norm referenced and criterion referenced aspects of the academy culture (Stevenson, 1999, p. 102). Respondents were compared closely to each other in addition to being observed as a stand-alone data description (p. 103).

Sampling was another difficult task to manage, given that a representative sample of public school teachers in the survey research is difficult to define (p. 24). To avert any disturbances in this process, demographic information was monitored to insure an accurate representation is achieved with the survey sample of teachers. For the purpose of this study, a representative sample will be operationally defined as a population sample of teachers that mirrors the demographics of teachers in Florida. Teachers, as measured in terms of the population sample, also include a proportional representation of private school teachers along with public school teachers in order to give the teaching profession as a whole an accurate representation.

CHAPTER TWO: LITERATURE REVIEW

Introduction

This study merely asks the respondents if their administration has given them a survey in the past year that gauges their desire to remain in their current teaching position, and whether or not the administrative follow-up was conducted fairly. Assuming that there is no such thing as a universally applicable retention survey, that academy cultures are primarily bureaucratic, and that within this hierarchal framework, teacher retention is the immediate responsibility of school administrators; the retention survey emerges as a necessity to prognosticate turnover. Based on this assumption, the inherent lack of universality of retention surveys warrants the need for school administration to perform a job analysis in order to contextualize their employees' job requirements and corresponding perceptions to them.

To disentangle the complicated subject matter that administration is faced with during this process, this literature review is given from a thematic perspective. The themes provided are not to be interpreted as an attempt to standardize any way of administratively approaching teacher turnover, but merely to provide visuals for easy reading. The following sections simply examine a list of applicable retention theory, followed by commonly occurring job-analysis themes, a definition of terms as used in this text, and finally, a brief example of how established administrative practices have struggled to exist within contemporary (K-12) academy framework.

Section 1: A Theoretical Foundation

Hackman & Oldham's Job Characteristics Model

The theoretical design for the survey instrument in this study has been drawn primarily from the Job Characteristics Model. Hackman & Oldham (1980) asserted that desirable job outcomes are cultivated in response to the task itself. For motivation to prevail among the workers, the tasks being assigned must stimulate satisfaction within their own specific context (Hackman & Oldham, 1980, p. 14). Tasks must be identifiable from beginning to end with a tangible outcome; the tasks must also substantially impact people for the tangible outcome to have relevance to the workers (p. 16). Another vital characteristic of the Job Characteristics Model is that it relies heavily stretching the capabilities of the workers to provide a challenging work environment (p. 45). To accomplish this, workers are given greater levels of autonomy, job enrichment and job rotation. To determine if a work environment is motivating the workers, a job diagnostic survey is periodically given. If deficiencies are found in the job diagnostic survey results, work redesign is implemented to improve worker performance (p. 125).

Voice and Referent Cognitions Theory (RCT)

One of the strongest indicators of whether or not an administrative decision will succeed or fail is the amount of participation the workers had in the decision making process (Tyler, 1987, p. 333). When workers have a voice in the decisions that are made at the management level, the workers more often than not perceive the procedures within the organization more favorably (p. 334). In fact, when employees have a voice in the problem solving procedures that are implemented at the managerial level, worker outcomes are generally produced in more favorable quantities as opposed to when the employees are not given a voice in the managerial decisions (p. 334). A common exception to the previously stated occurrence is that if employees have strong preexisting views about an organization or its procedures prior to the execution of managerial decision, outcomes tend to not be effected (P. 341). Although strong preexisting views that the workers have tend to petrify any immediate outcomes, managerial decisions are still viewed more favorably when the employees are at least given a voice in the process (p. 342). Also in this respect, Referent Cognitions Theory (RCT) bolsters Voice Theory by providing better insights to how it relates to the preexisting views that employees hold (Folger & Skarlicki, 1999, p. 38).

Grounded Theory

In qualitative research where relationships among variables – or even the variables themselves – are subjective, it is imperative to legitimize the variables with existing data (Evans, 2013, p. 2). Grounded theory simply identifies an area of interest and uses a reference point to operationally define the variables (Rubera & Ahmet, 2012, p. 140). In the instance of this research, the reference point would simply be the interaction of organizational culture, worker mobility and working conditions. When a study is grounded, it allows subjective data to be furthered by examining the "codes" or variables that formulate it (p. 143). The end result of a study with a grounded approach is that a theory is eventually developed based on the observed characteristics of the grounded data (Evans, 2013, p. 12).

Job Embeddedness Theory

Job Embeddedness is quite simply what the name implies: If an employee is embedded to their job, it is unlikely that they will leave (Lucia, 2004, p. 399) Job Embeddedness is measured with the relationship of an employee's fit to the organization, social links to the workplace and local community, and the potential sacrifices that would have to be made to leave the job (p. 401). The Job Embeddedness approach represents a significant stage in the evolution of retention theory in that it uses regressions to estimate the likelihood that an employee will leave. A severe limitation to this theory, however, is that it places a heavy emphasis on factors, like marital status and connection to one's neighborhood, that appear outside of the jurisdiction of a manager's control (Hemp, 2004, p. 50). The factors of fit, link and sacrifice also do not provide a direct link to management strategies, which can be problematic concerning its potential for practical application (p. 51).

Human Capital Theory

Human capital theory states that human workers are not a fungible commodity and may not be used interchangeably (Bodenhofer, 1997, p. 432). Although the theory of Human Capital emerged out of a workers right's movement, it recognizes that human workers bring value in the form of intangible assets to the workplace, often in the form of learned skills, innate talents, and relationships (p. 438). Human capital theory views the

individual employee as an asset or liability to the organization in measurable terms regarding their ability to produce; therefore, typically warrants higher pay for experience, full-time status, education, and professional certifications. In effect, the Human Capital theorist pays to have access to the worker and doesn't necessarily pay the worker for the job – it is simply assumed that the worker will use their abilities to produce upon receiving proper supervision (p. 441). Another facet of Human Capital theory is that the workplace is often fitted to accommodate the basic human needs of the workers in an effort to maximize productivity. Since human beings are responsible for the production, benefits like flexible hours, professional development, and healthcare are often viewed as an investment rather than an expense (p. 442).

Holland's Theory of Vocational Choice

John Holland developed a theory of congruence – that a person's personality type will help determine whether or not they will be satisfied with their job (Arnold, 2004, p. 95). Although this theory overlooks the effect of the work environment on personality, it does provide a basis to align job candidates with positions based on their inherent personality strengths (p. 96). An individual who is introverted or agoraphobic, for example, would likely feel very uncomfortable in a teaching environment where they would be expected to be the center of attention and to socialize with large amounts of people. On the other side of the spectrum, a person who prefers to socialize may be disheartened to work as an administrator in a closed office all day (p. 100). With intent to match common personality types with the needs of the contemporary job market, Holland categorizes job

applicants into six (6) categories: Realistic, Investigative, Artistic, Social, Enterprising and Conventional (P. 101). This theory is often used as a reference point when formulating interviews for new job applicants or job reclassification of current employees (Walley, 1998, p. 96).

Maslach's Burnout Inventory

Burnout illustrates the emotional distress that occurs when employees perceive that their inputs and outputs into an organization do not commensurate (Shore, 2004, p. 725). Inputs can be defined in terms of effort that is exerted into the organization, while outputs typify the outcomes of the inputs (Scott, 2009, p. 1091). Disengagement is often the result of burnout and engagement is assumed to be the antithesis to burnout. Christina Maslach asserted that burnout was caused by a relationship among exhaustion, cynicism and inefficacy (Maslach, 2008, p. 500). Exhaustion portrays a worker's feeling that they cannot continue working on the task; cynicism reflect negative feeling that the employee may harbor towards end-users and inefficacy depicts the employee's tendency to harbor personal feelings of inadequacy (p. 501). Recognizing a need to address burnout that is rampant in target areas, Maslach formulated a burnout survey for several different occupational areas, one of which is for educators (p. 507). Although Maslach's theory of burnout has commanded little recognition from the American Psychology Association (APA), being that it has no classification in the Diagnostic and Statistics Manual (DSM), it has been widely recognized throughout international literature, including the World Health

Organization (WHO). To date, Maslach's burnout inventory remains the most common instrument to gauge employee burnout (Shim, p. 590).

McGregor's Theory X and Theory Y

Douglas McGregor claimed that managers could be divided into two (2) separate categories: X-mangers who distrust their employees and tend to adopt an authoritarian management style as a result; and authoritative y-managers who trust their employees to assume responsibility (Sahin, 2012, p. 161). X-managers would likely claim that employees naturally dislike work and are only motivated by compensation, while y-managers tend to view employee motivation as a result of many factors; of only one which is compensation (p. 165). In x-type organizations, there is usually a centralized power structure that controls workers from the top-down approach, and it is also not uncommon for these organizations to inspire fear to enforce rules or even to be top-heavy. In y-type organizations, management delegates a substantial level of authority to the workers and employees are normally allowed to make decisions without supervision (p. 172). Although McGregor failed to legitimize the practicality of these theoretical claims with any concrete evidence, he succeeded in identifying relationships between assumptions, management style, and morale (P. 174).

Equity Theory

Equity theory contrasts with Human Capital theory in that it states jobs should be paid – as opposed to the employees themselves (Gill, 2010, p. 350). Unlike Human Capital

theory, which places a value on human workers as an intangible asset to the organization, equity theory asserts that the only asset an employee provides to an organization is the job that they perform (Shore, 2004, p. 722). Although equity theory has been criticized for using subjective point systems, ignoring social constraints like work-life options or supply and demand; it provides irrefutable groundwork regarding perceptions of fairness (p. 726). When employees perceive that they are not being paid fairly when compared to their colleagues, this perception of inequity often has a negative impact on morale and worker performance (Gill, 2010, p. 360). Equity theory provides the notion that when workers believe their compensation is not congruent to their input to the organization, they will adjust their performance to a level that they believe is fair (p. 727).

Self-Actualization and the ERG Model

Abraham Maslow's theory of self-actualization has been excessively cited, to the point that it is a cliché in motivational literature, but it is important to note that the underlying basis for Maslow's reasoning is that people tend to be motivated by their hierarchy of needs (Ogilvie, 2009, p. 16). In brief, Maslow's hierarchy superordinates basic human needs, like food and shelter, over social needs, which are superordinated over selfactualization or one's ability to reach their potential (p. 17). To simply Maslow's theory, Clayton Alderfer proposed that individuals are motivated by needs related to ERG, or existence, relatedness to others and growth (Chang, 2008, p. 45). Although Maslow's selfactualization theory and the ERG model have severe limitations, they are two of the most

influential theories that have shaped contemporary management practices. The strength to these theories is that management can use an employee's need level as a platform for management decisions (p. 49).

Reinforcement Theory

Reinforcement theory works where Holland's theory of vocational choice doesn't in the respect that it views behavior as a result of environmental stimuli as opposed to an object of internal characteristics (Ogilvie, 2009, p. 16). Reinforcement theory originated with Edward Thorndike in the early 1900s and was improved by BF Skinner a generation later, becoming known as an aspect of the school of behaviorist thought (p. 17). From a management perspective, behaviorism maintains that employees' behavior can be manipulated to become more desirable to the needs of the organization based on the administration of rewards and punishment, otherwise known as reinforcement mechanism. Positive reinforcement implies that the employee is rewarded for exhibiting desirable behavior, while punishment entails an employee being reprimanded for unproductive behavior is regained and extinction requires that management simply ignore the employee, with the hope that the undesirable behavior will discontinue (p. 51).

Herzberg's Motivation-Hygiene Model

This theory is also knows as Herzberg's two-factor theory. Herzberg maintained that in the workplace, it is just as important to prevent job dissatisfaction as it is to promote job

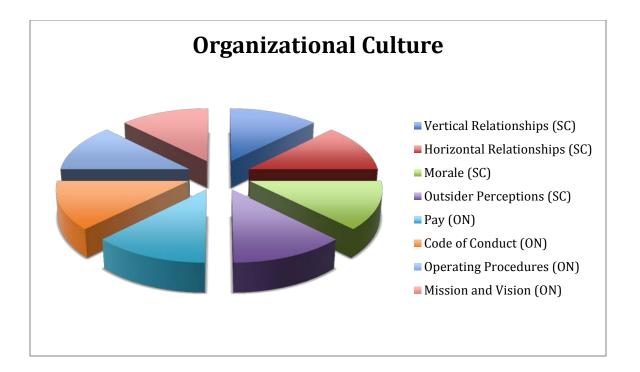
satisfaction (Fisher, 2009, p. 349). Herzberg stated that satisfaction and dissatisfaction were two separate factors and that the opposite of satisfaction is no satisfaction and the opposite of dissatisfaction is no dissatisfaction (p. 352). In the workplace, this translates to implementing hygiene factors, like improvements with pay, working conditions, and flexible hours – in order to prevent dissatisfaction (p. 365). On the contrary, motivating factors like recognition and opportunities for advancement within the organization are needed to promote job satisfaction (Utley, 1997, p. 2). Although Herzberg's two-factor theory can be viewed as a practical extension of Maslow's hierarchy of needs, critics of Herzberg contend that the Motivation-Hygiene model relies too heavily on one's self-serving bias, or tendency to attribute their successes to their own personal abilities while blaming failure on external factors (p. 7).

Section 2: Job Analysis Themes

Organizational Culture

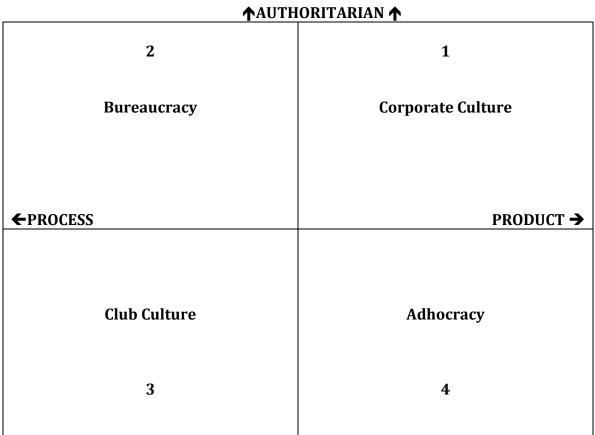
Organizational culture is simply the personality that an organization has (Dull, 2010, p 858). Although organizational culture is very complex and there is no general consensus about how to conceptualize it, an organization is usually best served when organizational culture evolves to adapt to challenges that the organization may face (Lucia, 2004, p. 397; Scott, 2009, p. 1087). Put into perspective, an organization's culture can be used to describe the way that the organization accomplishes its mission (Lucia, 2004, p. 398). Organizational culture is simply fabricated from the social climate and norms that exist at

the organizational level and may include factors like pay, vertical relationships, horizontal relationships, standards of practice, and morale (Martens, 1999, p. 41). There are several different types of organizational culture, depending on the mission and vision of the organization, but a continuum can be used to identify the most common types of organizational culture (Gronewald, 2013, p. 189). The continuum below, integrated with the social climate (SC) and the organizational norms (ON) that dominate a work environment, could be used to provide an accurate contextualization of the organizational culture (Scott, 2009, p. 1089; Gronewald, 2013, p. 194). The typology continuum explains the types of organizational culture with the process-product dialectic representing the horizontal axis and the authoritarian-laissez faire dialectic representing the vertical axis. This alignment to typology is to be factored alongside the weight of the social climate and organizational norms (Lucia, 2004, p. 399). Placement at the center of the plane represents authoritative tendencies on the vertical axis and pragmatic tendencies on the horizontal axis (Scott, 2009, p. 1089).



- Organizational Culture is the personality of an organization.
- Organizational Norms (ON) and Social Climate (SC) are what primarily create this theme when analyzing jobs.
- There is no universally accepted model for organizational culture, but this example illustrates how easy it is for organizations to approach this job analysis theme from multiple angles.

Figure 2: Organizational Culture Illustration



↓LAISSEZ-FAIRE **↓**

- Movement toward the center represents the tendency to be authoritative on the vertical axis and reflects pragmatism on the horizontal axis.
- All opposing ideas are disruptive to one another; so predictability exists at the center while volatility exists at the extremes.
- Academy Culture tends to lean toward quadrant 2.

Figure 3: Organizational Culture Typology

Horizontal Axis: The Process-Product Continuum

As an organization becomes more oriented towards its product or outcome, its cultural disposition progresses to the right. Product-oriented organizations tend to be highly competitive and are driven by fast, measurable results (Utley, 1997, p. 3). In a product culture, the practical needs of end-users are prioritized and workers are encouraged to take risks, innovate and improvise until the needs of the end-users are satisfied (Hoo, 2003, p. 55). In order to facilitate this type of environment, management often incentivizes desirable outcomes by offering different types of rewards or punishment in exchange for worker performance. In contrast, the process culture emphasizes ideological norms and conformity with little to no link established to results (Rubera & Ahmet, 2012, p. 132). Process cultures focus on cooperation and there is a very low tolerance for criticism, individual differences or conflict; this tends to stifle any possibility for innovation (p. 133). The center of this continuum is represented by the pragmatic organizational design; Pragmatic organizations view their products or outcomes as being directly related to their process.

Vertical Axis: The Authoritarian-Laissez Faire Continuum

Authoritarian organizations are characterized by a rigid, top-down hierarchal management structure that emphasizes control (Hoo, 2003, p. 61). Authoritarian organizations are managed with a centralized command and control nucleus. Workers are strictly monitored at every level of management, with the executive cadre reserving absolute authority over decisions. Authoritarian organizations are devised under the premise that employees do not know what is best for the organization and/or are not capable of working in the best interest of the organization without strict supervision. On the contrary to this, laissez-faire organizations lack a centralized command and control nucleus as authority is simply transcended among the members of the organization (p. 62). Workers are allowed to work freely on their tasks without any intervention from authority figures. Flexibility is also highly characteristic of the laissez-faire model as roles among members may continually evolve. The center of the vertical axis represents the authoritative model of organizational culture; this approach allows managers to retain executive authority while allowing workers enough flexibility to make tactical decisions (Dull, 2010, p. 860).

Quadrant 2: Bureaucratic Culture

Bureaucratic organizations are very systematic schemes, typically resting on the foundation of a hierarchal management structure (Hoo, 2003, p. 65). Bureaucracies may be mission-driven, but prioritize the process of the mission over the desired outcome of the mission. As a result of this disposition, bureaucratic organizations reward or punish workers more for their level of conformity, as opposed to their measurable work performance (Lucia, 2004, p. 401). In a bureaucratic organization, employees are also placed in very specific job descriptions with strict procedures to follow in the interest of consistency. Although bureaucracies tend to be very uniform in the manner that they operate, they tend to also be very unpredictable simply due to the fact that the entire

operating procedure of the organization can be changed on a whim of the executive manager (Rubera & Ahmet, 2012, p. 135).

Quadrant 1: Corporate Culture

Sharing the hierarchal management design of the bureaucratic organizations, the corporate culture differs from a bureaucracy in the respect that they are oriented toward the outcome of the mission (Galetic, 2009, p. 915). A corporate culture tends to tolerate individuality, differences in opinion, and constructive conflict – as these circumstances may inspire innovation (Stevenson, 1999, p. 103). Unique to corporate culture is the dynamic of perpetual competition; not only is the organization competing with other organizations to produce a more desirable product, but the workers are in competition with each other, as competition is often viewed by corporate management as a performance incentive (Shim, 2012, p. 586). Although corporate culture tends to encourage workers to compete and take calculated risks, accountability and personal responsibility are also steep characteristics of corporate culture; mostly attributable to the fact that corporate culture always prioritizes the bottom-line over all other endeavors (p. 588).

Quadrant 3: Club Culture

An organization that has a club culture shares the process-oriented conformist ideals of a bureaucracy, but does not have a rigid top-down management structure. (Galetic, 2009, p. 912) When management categorically exists in a club culture, the role is much more generalized and much less formalized than counterparts in the authoritarian bureaucracies and corporate cultures. A by-product of the conformist norms of the club culture is that individual members may possess a veto-power when it comes to many situations (Utley, 1997, p. 13). Club cultures are characterized as being highly selective, with membership in the club only being permitted to individuals who are deemed to be a desirable fit (Shim, 2012, p. 585).

Quadrant 4: Adhocracy

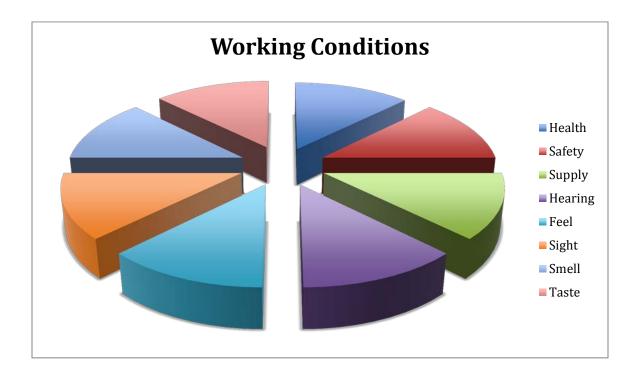
Adhocracies have little to no structuring, with membership based on a shared desire to solve a problem by capturing opportunities from a diverse realm of possibilities (Hoo, 2003, p. 59). Adhocracies thrive on individuality, flexibility, and improvisation; as a result, adhocracies also tend to be very efficient. Workers who are members of an adhocracy voluntarily assume a functional task, of which may or may not be relevant to their expertise (p. 63). While it is counterintuitive, an adhocracy relies on conflict and uncertainty to spur innovation; although this approach is highly effective at solving abstract problems, it is not intended to be used where consistency is expected by end-users (p. 64). Simply put, an adhocracy is characterized by not having any norms, other than finding a solution to the problem – this implies that there are no clearly defined roles, job descriptions are always evolving and there are no standardized rules or procedures to operate by (Rubera & Ahmet, 2012, p. 132).

Working Conditions

Working conditions simply combine the elements of the physical working environment and how they are perceived by the senses (Andersen, 2005, p. 13). Working conditions provide a reliable variable to measure workplace motivation on the grounds that worker attitudes are strongly affected by the physical environment of the workplace (Hasle, 2011, p. 623). In fact, when workers perceive that their working conditions are inadequate, it can be predicted that the workers will more likely than not leave (p. 624). The tendency for workers to avoid working in physical conditions that are below their expectations is largely attributable to the fact that there is an undue hardship implied with the circumstances. (p. 627). When workers are expected to perform in physical conditions that fall outside of their expectations, it creates an unfair division of labor that is often preventable at the management level (Hemp, 2004, p. 57). More specifically, workers may feel their spirits crushed as they are being made to pay for negligent management decisions (Thatcher, 2012, p. 3820).

Working conditions can be thought of as an eight-piece pie with the five senses each having a piece alongside health, safety and supply conditions (Andersen, 2005, p. 14). Considering that sensory reactions to working conditions generally amount to a type of appeal, working conditions could be thought of in terms of the Elaboration Likelihood Model (Cacioppo & Petty, 1986, p. 22). Workplace conditions that relate to health, safety

and the sensible use of supplies are generally processed along central routes of appeal, whereas more of the creature comforts (or lack thereof) in the workplace that relate directly to the senses are processed along peripheral routes of appeal (Cacioppo & Petty, 1979, p. 102). Put together, the ELM helps to simplify the tedious complexities of working conditions relating to employee retention, by putting them into the perspective of a simple piece of pie.

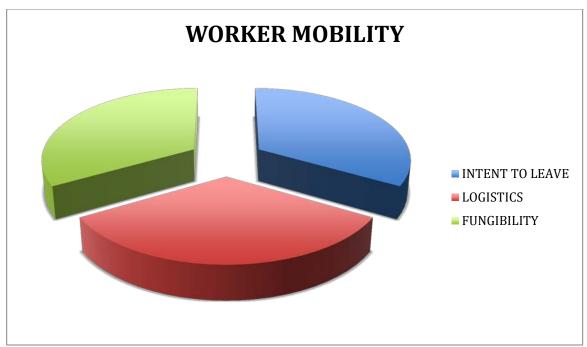


- Working Conditions combine the physical working environment and how they are perceived by the sensory perceptions.
- Health, Safety and Supply can be thought of as central working conditions, while the five (5) sensory reactions could be thought of as peripheral working conditions.
- No universal model for working conditions exists, but the Elaboration Likelihood Model (ELM) helps to provide a simple perspective.

Figure 4: Working Conditions Illustrati

Worker Mobility

Worker mobility is the force that determines whether an employee is willing or able to leave a job, balanced with whether the employer is willing or able to retain the employee (Pilar, 2002, p. 230). Worker mobility can be thought of a piece of pie where the factors of fungibility, the worker's logistical obstacles and the worker's intent to leave are measured for sensitivity and then calculated to determine the worker's overall mobility. The mobility theme is simply a capacity; a high mobility worker indicates that the employee has a high capacity to leave, but may or may not leave, depending on the weight of the organizational culture and working conditions (Bodenhofer, 1997, 441). By way of this explanation, worker mobility includes workers who both change geographic locations and jobs.



- Worker Mobility is a theme that expresses likelihood that a worker would leave a current occupational position, or more broadly, a geographic location.
- Fungibility illustrates the degree management perceives labor to be replaceable.
- Logistics simply shows what means a worker has to leave a current position.

Figure 5: Worker Mobility Illustration

Job Analysis Themes: Contextual Referencing in the Absence of Universal Models

Organizational Culture

Without any regard to an organization's location on the culture continuum, factors that comprise organizational culture are merely the prevailing behavioral characteristics within the organization (Dull, 2010, p. 858). Any standard of practice, social norm, expectation or adaptation to the social climate are included in the concept of organizational culture. To get a glimpse of the culture that dominates an organization, a good place to look first is the mission and vision (Hasle, 2011, p. 638). While these statements may amount to nothing more than a spattering of convoluted buzzwords in many organizations, others may use the ideas in the mission and vision as an understructure for their entire agenda. In whatever case, the mission and vision of an organization often shapes the way that outsiders view the organization, which is another condition inherent in an organization's culture (p. 639). The way that outsiders view the organization has the potential to have a profound impact on morale – for better or worse.

The approach that management has to leading the organization also has the potential to cultivate desirable behavior. Managers who maintain professional boundaries, enforce rules impartially and allow workers enough personal time to tend to their needs that fall outside of the organization's purpose not only have more productive workers, but are typically viewed more favorably by their workers (Martens, 1999, p. 39). Consistent with the behaviorist reinforcement theory, organizations that routinely incentivize desirable outcomes with rewards or punishment are also held in high regards by workers;

for this reason, pay, dress codes, collegiality, and the procedures issued by management are all aspects of organizational culture since they all reference desired norms in a functional organization (Dull, 2010, 856).

Worker attitudes, whether resulting from introspection or due to environmental stimuli at the organization, are also included with the concept of organizational culture (Chang, 2008, p. 60). As functional organizations operate under the premise of professional standards and functional workers have a professional relationship with their organization, worker attitudes reflect the functionality, or lack thereof, of an organization's culture (p.61). When workers perceive the workplace to be unfair or dysfunctional, they will be more inclined to contribute to absenteeism or presenteeism (Campbell, et al., 2007, p. 191). Whereas absenteeism, or the nonappearance of workers to their obligations, is a common word in the parlance of human resource (HR) management, presenteeism is often avoided in most modern HR literature (p. 207). Presenteeism occurs when employees are present at times that they probably shouldn't be working – often sick with contagious illnesses, physical injuries or coping with mental distress (Chambers, et al., 2011, p.2). Presenteeism has proven to cause exponentially more harm to organizations than absenteeism, typically costing organizations an excess of five (5) times the damages afflicted by absenteeism (Hemp, 2004, p. 51). Presenteeism is vital to the study of attrition within organizations by reason of attrition ignoring its harmful effects; a culture of attrition tends to be short sighted and does not equate presenteeism with net losses on its bottom line (p. 53).

Working Conditions

For the purpose of contextualization, working conditions can be separated in two categories: Peripheral factors affecting the senses and central factors regarding health, safety and supply (Campbell, et al., 2007, p. 190). The vast majority of legislation and organizational policies usually revolve exclusively around the central issues, despite the fact that the peripheral working conditions could have a commensurate impact on the livelihood of an organization (Thatcher, 2012, p. 3816). In reference to the central factors, health and safety issues are primarily concerned with compliance Occupational Health and Safety (OSHA) and local health department standards. Health factors include anything that contributes to the medical condition of the organization's membership – mold in the air conditioner, nutritional value of the cafeteria food, and roach infestation and the lack of soap in the lavatories would all qualify (P. 3820).

Whereas health issues are primarily concerned with medical factors in the workplace, safety issues are delineated to cope with the anticipated risks that occur on the job (Campbell, et al., 2007, p. 201). It is expected, for example, that construction workers will have foreign objects fall on their heads during the course of their careers, so a safeguard is taken against this risk by requiring the workers to wear a hard-hat. To put the educational setting into perspective, common safety issues would include factors like slippery floors, physical threats and exposure to the elements (Chambers, et al., 2011, p. 6). Supply matters strictly involve anything that the workers need to do their job correctly. In a functional environment, it would be expected that teachers would be given all of the

technology, writing utensils and classroom resources that they require for performing their duties. Although some teachers may exercise the option to spend some of their own money on classroom supplies, dysfunction occurs at the organizational level when the teachers find themselves spending their own money out of a feeling of obligation to do so (Kaye, 1999, p. 44).

In areas regarding teacher turnover, the peripheral working conditions are just as important to consider as the central factors (Campbell, et. al., 2007, p. 200). Annoying noises, bad smells, and ugly sites, like chewing gum on the sidewalk or graffiti, certainly qualify as factors that contribute to turnover propensities. Whether or not office furniture is comfortable or that tools, like keyboards, are ergonomically designed to prevent carpel tunnel exemplify what is implied by the sense of touch. The taste of the food in the cafeteria or even in snack machines also has its place in the role of employee turnover. What is important to note about the peripheral factors is that they are solely based on perceptions of individuals and do not necessarily indicate that there is a dysfunction within the organization (Kaye, 1999, p. 31). The caveat to this reasoning, however, is that considering perceptions are a reality to those who perceive them, an organization is dysfunctional if it is presented with the opportunity to correct peripheral problems and simply neglects to.

Worker Mobility

Worker mobility is a capacity that any employee potentially has and can be summarized by an employee's intent to leave, perceived fungibility and conditions surrounding their commute (Pilar, 2002, p. 225). Simply put, the intent to leave is signified by an employee's desire to leave their current job (Shniper, 2005, p. 30). The intent to leave represents the employee's state of mind regarding their place in the organization compared to tangible alternatives (p. 32). An employee who intends to leave may not actually have a plan, or the means to do so – this is where the element of logistics weighs in. Logistical obstacles that an employee may have to contend with include the commute to work, level of dependence on the job, personal ties to the geographical area and the hardships associated with potentially changing their physical address. Stated differently, logistics could simply be thought of as an employee's means to fulfill their intent to leave (Pilar, 2002, p. 229).

Now, suppose that an employee has no desire to leave their job and doesn't have the means to leave. The employee's mobility cannot be accurately predicted without also factoring the perceptions of management. Fungibility measures the tendency for management to view their workers as interchangeable and replaceable. In context, a manager who perceived the employees to be a fungible commodity would likely view employees to be interchangeable and replaceable, much like flashlight batteries. In a manner very similar to the management styles that overlook the impact of presenteeism, fungibility is vital to the study of employee attrition due to the fact that it implies

management is ignoring the adverse impact that such a factor has on an organization's bottom line (Hemp, 2004, p. 50). Perceptions of worker fungibility are common in hierarchal organization types that rely heavily on standardization.

Section 3: Definition of Terms

Adhocracy – An organizational type that lacks structure and is characterized by the gathering of professionals with the shared desire to remediate a problems by searching a boundless realm of possibilities.

Absenteeism – Entails that an employee is absent from their obligations.

Attrition – A tolerated systematic weakening of the target workforce. Although widely applicable to industrial settings, attrition is a term often used in military history to describe aimless battles (i.e. Verdun, the Somme, Stalingrad, etc.) where the only objective was to sustain fewer casualties than the opposition.

Authoritative – A leadership style where management reserves full authority over the operation, but allows the front-line workers enough flexibility to override procedural norms.

Authoritarian – A leadership style where management reserves absolute authority over the operation and workers lack flexibility to override procedural norms.

Breakage – Revenue created for an organization when its paid services are unused.

Bureaucracy – An organizational type that is characterized by a top-heavy hierarchal management structure, authoritarian norms and a preference for procedure over outcomes.

Burnout – A work-related condition that signifies the emotional distress caused when a worker perceives that their efforts do not commensurate with their results.

Club culture – An organizational type that lacks rigid structure, further characterized by conformist ideals and being highly selective.

Corporate culture – An organizational type that has a very rigid, hierarchal management structure and prefers results over procedure.

Elaboration Likelihood Model (ELM) – A cognitive theory of central vs. peripheral appeal with central processing dealing with the rational side of the mind while peripheral processing primarily concerns how stimuli appeal to the senses. Encumbrance Accounting – A popular type of accounting in school organizations that reconciles appropriated funds with financial commitments.

Equity – A Perception of fairness that observes whether managerial decisions are applied equally among the workers.

Extinction – The deliberate elimination of undesired behavior by removal of the reinforcement stimulus.

Fungibility – A description of an asset that is perceived to be interchangeable and fit for mutual substitution.

Hearing – Refers to a how employees perceive disquietude in the workplace.

Health – Refers to the medical condition of the workplace.

Horizontal Relationship – Describes the functionality of a relationship among colleagues.

Intent to Leave – Describes an employee's measurable desire to leave their current workplace.

Job Embeddedness – A retention theory which accurately predicts intent to leave and turnover based on an employee's vested interest in the organization and local community.

Laissez-Faire – A leadership style where organizational rank is merely transcended and the workers assume all responsibility, commensurate with authority.

Logistics – Refers to all facets that involve an employee's ability to transfer from point A to B.

Negative Reinforcement – A manager's removal of a negative stimulus when an employee begins to exhibit desirable behavior.

Organizational Culture – The personality of an organization.

Positive Reinforcement – A manager's intervention with a positive stimulus when an employee begins to exhibit desirable behavior.

Pragmatism – In organizational culture, describes an organizational type that prioritizes the interests of the end-users over its product or process.

Presenteeism – The practice of attending work while in an unproductive state. Usually, this entails attending work while sick, injured or in emotional distress.

Product Culture – A type of organization that prioritizes the quality of its outcomes over the process that is used to achieve those outcomes.

Process Culture – A type of organization that prioritizes its operating procedure over end results.

Punishment – A manager's attempt to correct undesirable behavior by introducing a negative stimulus.

Referent Cognitions Theory (RCT) – Stipulates the impact of preexisting views employees may hold during the administration of organizational justice.

Safety – A working condition that refers to occupational safety, or the management of anticipated physical risks associated with the occupation.

Sight – Refers to how employees perceive their physical surroundings.

Smell – Refers to how employees perceive aromas that emanate from their work area.

Supply – Refers to the degree that employees are given the tools required for successful completion of their tasks.

Touch – Refers to the level of comfort that employees have with their physical surroundings. Typically, this revolves around the ergonomics of organizational tools and furniture.

Taste – Refers to how employees perceive the sapidity of food concessions.

Turnover – The rate that an organization has to replace employees; calculated by dividing the number of vacated positions by the total number of positions in the organization and multiplying by 100.

Turnover Cost – Estimates the cost burden of employee turnover by multiplying the turnover rate by a hypothetical percentage of the target employees' pay.

Vertical Relationship – Describes the functionality of a relationship between a manager and subordinate.

Voice – A perception of fairness that observes whether workers are allowed to participate in managerial decisions.

Worker Mobility – The capacity that a worker has to relocate to a different job.

Working Conditions – An index of all physical circumstances affecting perceptions to the work environment.

Section 4: Interrelating Established Management Strategy and Teacher Attrition

Encumbrance Accounting and Breakage

Encumbrance accounting has risen to prominence in the education establishment, especially in the public sphere, as an instrument that preserves the integrity of fixed budgets (Perks, 1993, p. 15). Encumbrance accounting provides the school administrator with a reliable process to balance financial commitments with appropriated funds. Fixed expenses are anticipated on contingent liabilities, take teacher salaries, for example, thereupon these commitments are simply encumbered on the school budget, which reconciles all appropriate funds to these future obligations (Sharman, 2003, p. 7). One discernible effect of encumbrance accounting arises from the tendency to produce breakage. Whenever teachers vacate their positions, the remainder of the balance that was encumbered for their salary is often posed to become a cash windfall for the school or parent organization (p. 8). Such occurrences obscure the detrimental impact of teacher turnover by disassociating it from its designation as a liability (p. 9).

Micromanagement

Virtually an ineludible reality in most contemporary school organizations, teachers are required by various levels of regulatory guidelines to produce lesson plans, which are

routinely audited by administrative personnel (Flores, 2012, p. 12). Concomitant to this auditing process is the requirement for persistent performance feedback, followed by administrative revisions to the lesson plan (p. 14). Problematic assumptions to this act of micromanagement are: That the teachers are incompetent; that the administrators are more competent teachers than their subordinates; and, that the teachers cannot be trusted with autonomy (Walley, 1998, p. 62). All of these assumptions have been shown to produce conflicts of interest, often creating vicious cycles in the organizational setting (Bodenhofer, 1997, p. 439). To further add to the dysfunction that is often inherent in micromanagement, administrators with the inclination to scapegoat others are categorically empowered. When employees are micromanaged, it creates a self-serving operating design that allows the manager to easily assume credit for worker successes while simultaneously delegating blame for failure to the employees – as the employees are innately restricted from any alternate course of action that could've prevented the failure (Lucia, 2004, p. 398).

Accountability and Assessment

Performance evaluations for teachers are conducted with a combination of value added modeling (VAM) and quality observations (Hanshushek & Rivkin, 2010, p. 267). Value added modeling aims to relate teacher performance to student achievement by comparing the measurable difference in student test scores over time. Regression analyses are used to anticipate student performance levels, whereas deviations from this linear

prognostication are attributed to teacher performance (p. 269). Complementing VAM assessment are quality observations: As the name implies, these are formal observations of instructional quality coordinated by administration. Pedagogy, adherence to benchmarks and classroom climate are among the several factors that are observed during this process, which culminates in feedback from the administration (Paige, 2012, p. 30). As a result of construct bias and wide confidence intervals, neither VAM nor quality observations provide a reliable instrument to measure performance (McCaffrey, 2003, p. 5).

CHAPTER THREE: METHODS

<u>Design</u>

This study used the descriptive research design, as interventions were not used to manipulate data. Descriptive design does not show causal relationships, so by definition, has no internal validity (Fisher, 2009, p. 348). The data that was collected gives a generalizable description of naturally occurring phenomena, so has high external validity. In practical terms, this means that this research design is useful for answering the question "what is this?," and not very useful for answering the question "does x cause y?" (p. 361). The survey method was used to collect the descriptive data.

Subjects

Prior to being selected to participate in the survey questionnaire, the participants had to be qualified. The participants were qualified based on their job function in teaching for at least one (1) year. Subjects were qualified and randomly selected upon being recruited by SurveyMonkey Inc. The ethnic composition of the random sample was: White, 84%, Black, 10%, American Indian, 0.5%, Asian, 0.5%, and, Other, 5%; 10 percent of were of Hispanic origin. In 2013, the Florida Department of Education (FDOE) recorded the ethnic makeup of Florida's public teachers to be: White, 71%, Black, 13%, American Indian, 0.3%, Hispanic, 13%, Other, 2.7% (2013).

The FDOE gender composition of the randomized population sample was: Women, 90%, and, Men, 10% (FDOE, 2013, Demographics). In 2013, the FDOE estimated that

approximately 20% of all public school teachers in Florida were men, however, this number comes from the fact that over a third (35%) of all public secondary school teachers are men, while only 9% of all public elementary school teachers in Florida are men (FDOE, 2013, Demographics). It is duly noted that the FDOE estimates only include public school teachers in Florida, which compose approximately 90% of the total Florida school teacher population sampled (FDOE, 2013, Demographics). Although the research questions in this text do not specifically engage matters specific to race or gender, shifting the focus more on the theoretical framework of school organizations, the raw demographic data is available in the Appendix of this publication for further viewing by future researchers, practitioners, or ethnographers.

After the selection process, the subjects consented to participate in an online survey environment, although participants were physically dispersed through all geographic regions of Florida. Respondents were not directly paid for participation, but one (1) U.S. Dollar (USD) was donated to the nonprofit organization Teach for America by the researcher as a token for each participant. Teach for America helps college graduates earn teaching certification in exchange for two (2) years of service in low-income areas.

Measures

The first survey question asks whether or not, during the past year if the subject was given a survey by school administration that gages their desire to remain in current teaching position. To answer this question, the respondents were given the options to answer yes, no, or choose to leave the form blank. Respondents who answered no for the first question did not continue; at this point, there was nothing more to describe about administrative retention efforts. Respondents who answered yes to the first question were directed to a two-prong model that measured their perceptions of fairness. These respondents were asked if they were given a voice in the administrative decisions following the retention survey and whether or not the administrative decisions were applied equitably among the subject's colleagues. The latter two questions were measured on intervals similar to a Likert scale.

<u>Procedure</u>

Due to the qualitative nature of descriptive research, the data collection procedure of this study involves observing for patterns, systematic recording of observations and review of documentation. The data from the initial yes/no question is documented and the records are compared to existing descriptions of administrative procedure in academy organizations. Survey questions 2 and 3 are first measured with an interval scale for description and then documented. The records of fairness perceptions are used to further describe content as it applies to respondents who answered yes for the first question. Once

data is recorded and patterns are observed, the descriptions are prepared for display by grouping or statistical mapping.

Ethical Considerations

Descriptive research offers the benefit of providing useful information in cases where experimental designs would otherwise be unethical, impractical or impossible to conduct. Consequently, this descriptive study has been approved by the Institutional Review Board (IRB) as a minimal risk function, and human subjects were used. The drawback to using human subjects for qualitative research is the risk of distress, misinterpretation and bias. In effort to improve the quality of the results by reducing these risks, the survey questionnaire was limited to three (3) functional questions. These survey questions were specially formulated to subsume the very complicated issue of whether or not school administrators are taking the necessary steps to mitigate propensities of teacher attrition.

CHAPTER FOUR: RESULTS

In total, 201 participants responded to the survey questionnaire, creating a representative data sample that closely mirrors the demographics of teachers in the State of Florida. Prior to participating in the survey, respondents were informed of their rights to confidentiality and anonymity. Moving forward, the respondents were then instructed to provide demographic data and authorization in the form of informed consent. Illustrating an administrative pattern of disaffiliation with retention surveys, only 51 respondents (25%) answered yes when asked if they had taken a retention survey within the past year. In relation to this same question, 150 respondents (75%) said that they were not given a retention survey; all respondents (100%) chose to answer yes or no.

If the respondent answered no to the first survey question provided, the questionnaire ended. The respondents who answered yes to the first question were directed to answer two (2) more questions: Whether or not they had a voice in the administrative decisions following the retention survey, and if these administrative decisions were applied equitably among the respondent's colleagues. Voice and Equity perceptions showed to be related to one another in this context, both as perceptions of fairness; however, actual results were mixed. When the Likert-type scale was simply divided into two categories (fair/unfair), the respondents were almost equally divided between the two categories. When a separate middle value was added (zones 4-7) in order to eliminate possible ambiguities, respondents were still equally divided between those who lean to the fair category vs. those who lean towards the unfair categorization.

Administrative Retention Efforts

Question#1:

During the past year, has your administration given you a survey that gauges your desire to remain in your current position?

Table 1: Retention Survey Participants

YES	NO	TOTAL
51	150	201
25.37%	74.63%	100%

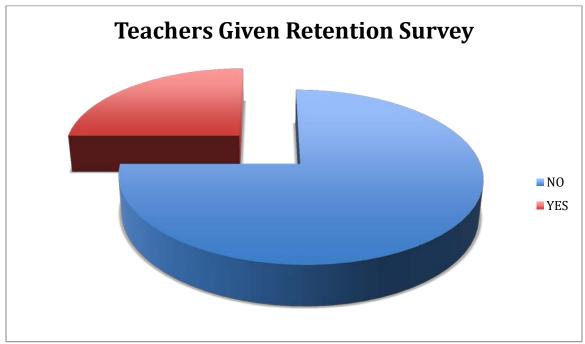


Figure 6: Teacher Retention Survey

- Approximately 25% of respondents were given a retention survey in the last year.
- About 75% of respondents were not given a retention survey in the last year.
- All of the respondents chose to answer either yes or no.

Perceptions of Fairness Following Retention Survey

Respondents who answered YES to the first question were directed to questions two (2) about voice and three (3) for equity. The questions were scaled from 1-10, as indicated below.

Table 2: Response Scale

Response Scale									
1	2	3	4	5	6	7	8	9	10
No	Not Really Somewh		hat	Likely		Very Li	kely	Yes	

Voice

Question#2: I was given a voice in the administrative decisions that followed the survey.

Table 3: Voice Results

1	2	3	4	5	6	7	8	9	10
10	3	1	1	11	3	4	4	7	7
								Total	51

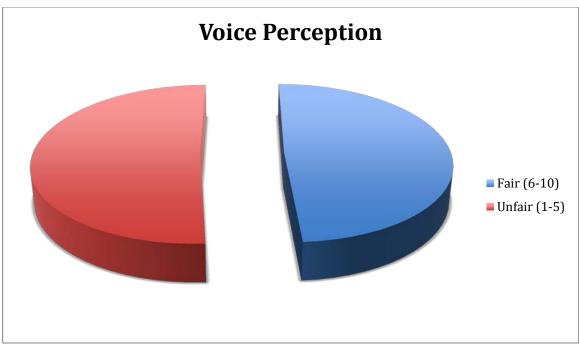


Figure 7: Voice Perception

- 49% of respondents were leaning towards fair (zones 6-10).
- 51% of the respondents were leaning towards unfair (zones 1-5).
- Results clearly show a split between fair and unfair.

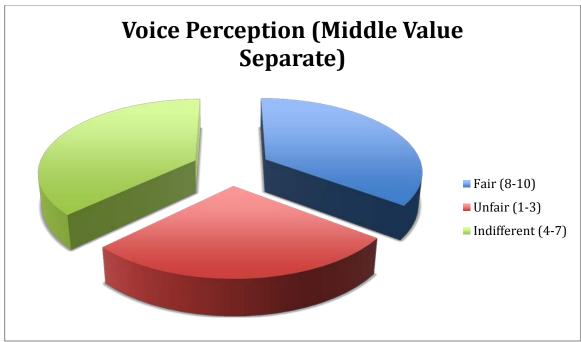


Figure 8: Voice Perception Middle Value

- 35% of respondents lean toward fair (zone 8-10).
- 27% of respondents lean toward unfair (zone 1-3).
- 37% of respondents categorize in the middle value (zone 4-7)

Equity

Question#3: The administrative decisions following the survey were applied equally among myself and my colleagues.

Table 4 Equity Results

1	2	3	4	5	6	7	8	9	10
14	1	1	2	8	2	4	5	8	6
								Total	51

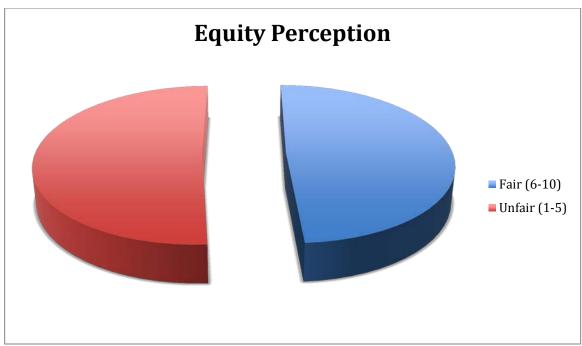


Figure 9: Equity Perception

- 49% of respondents lean toward fair (zones 6-10)
- 51% of respondents lean toward unfair (zones 1-5)
- Results clearly show a split between fair and unfair.

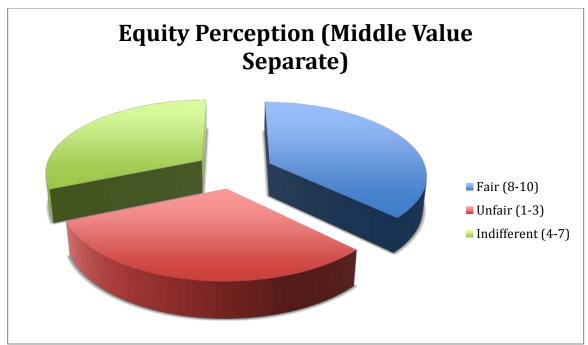
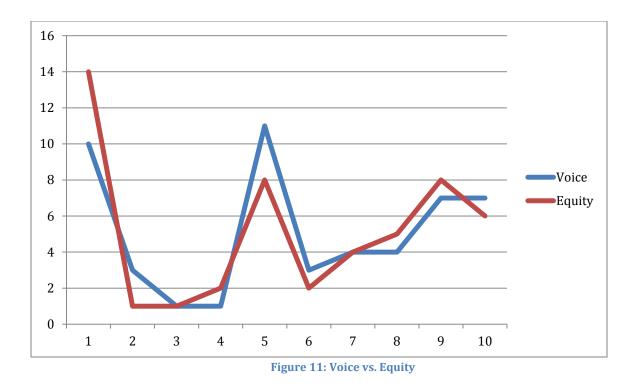


Figure 10: Equity Perception Middle Value

- 37% of respondents lean towards fair (zones 8-10)
- 31% of respondents lean towards unfair (zones 1-3)
- 31% of respondents categorize themselves in the middle value (zones 4-7).



- Results show that Voice and Equity are directly related as perceptions of fairness, within the context of education administration.
- Respondents show concentrations at the extreme fair value (1) and the center of the middle values (5).
- Negative responses gradually increase from zone 6 to 10, showing a clear absence of negativity bias.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary

This research was conducted with the purpose of finding descriptions within the procedural framework of academy organizations that could be used to further explain teacher attrition. To gather such descriptions, a survey was administered to a random sample of licensed school teachers in the State of Florida. Only a quarter of all participants were given a retention survey by their administration during the past year, and only half of those respondents believed that their administration handled the follow-up process fairly. The results show a clear illustration that employee retention processes have yet to be institutionalized in contemporary academy organizations, as actual retention efforts by administrators exist primarily at the individual level. This illustration is problematic, as teacher attrition cannot be managed effectively in contemporary academy organizations (K-12) without an embedded process that is designed to address it.

Conclusion

Based on the findings that only a quarter of the population sample received a retention survey from their administration within that past year, it is evident that employee retention procedures are not widely practiced in academy organizations (K-12). It is also evident that many of these isolated administrative efforts to implement retention surveys were without avail, by way that only half of all respondents perceived the follow-

up process to be fair. These descriptions as provided by the data, point to a logical need for process improvement before any successful attempt at mitigating the likelihood of teacher attrition could be accomplished (Galetic, 2009, p. 912). As with any problem, before problems with teacher attrition can be corrected, the problem needs to first be defined (Ogilvie, 2009, p. 15). By extension, in order to effectively manage any widespread occurrences of teacher turnover, a retention process must first be embedded in the organization's procedural framework.

Recommendations for Research

While powerful evidence has been drawn from this study that illustrates fundamental flaws in school bureaucracy, additional information would bolster these findings. First, it would be useful to know why administrators are not universally making efforts to diagnose the root causes of teacher turnover unique to their own schools or districts (Gronewald, 2013, p. 202). There are many possibilities, with diffusion of responsibility being a plausible answer, given the top-heavy hierarchal structure that is common in academy cultures (Walley, 1998, p. 25). Aside from this possibility, one would generally need to know what procedural impediments are embedded in an academy that would otherwise disincentivize administrators from turnover diagnostic efforts (Scott, 2009, p. 1088). Second, it would also be helpful to know how a lack of effort to diagnose employee turnover in academy cultures also affects non-instructor support staff and administrators themselves (Shniper, 2005, p. 31). Such discoveries could point to a much broader, more severe problem associated with the cost of employee turnover when all employees under the jurisdiction of the same administration are examined (Shim, 2012, p. 588).

Recommendations for Practitioners

Based on the findings from this study, it is recommended that school administrators elevate their awareness of the incompatibility between the standards and practices imposed by school bureaucracy and universally accepted logic (Pilar, 2002, p. 230). All problems, before they can be solved, must be identified and defined (Ogilvie, 2009, p. 15). Put into context, this means that before a pattern of teacher turnover at a school can be properly managed, the root causes have to be identified by first conducting a job analysis and then administering a retention survey based on that job analysis (Arnold, 2004, p. 98). This is absolutely necessary because there is no such thing as a one-size-fits-all employee retention survey (Utley, 1997, p. 6). If resistance to adjusting school procedure to achieve greater retention is too great at the administrative level, then slightly decentralizing the administrative hierarchy enough to empower teachers to autonomously assess themselves in adhocracies has the potential to work effectively (Murphy, 2005, p. 132).

APPENDIX A STATISTICAL TABLES

Part 1: Voice

Гotal
Iotai
5.647058824
5
5
3.173789718
10.07294118
9
1
10
51
0.892642725

Part 2: Equity

Descriptive	Total
Mean	5.470588235
Median	5
Mode	1
Standard Deviation (σ)	3.37255358
Sample Variance (s^2)	11.37411765
Range	9
Minimum	1
Maximum	10
Count	51
Confidence Level	0.948545961

APPENDIX B SURVEY INSTRUMENT

Teacher Retention Survey

Below: Please circle the option that best answers the question. Participation is voluntary and you may skip any question.

Years Teaching									
0-3	3-5	6-10) 1	10-15	15-20	20+			
Which category best summarizes your teaching experience?									
Early Childhood		Elementary		lle School	l	High School			
	Age Group								
18-27	28	-35 36-4	2 4	43-51	52-60	61+			
Gender									
		Female	Male		Other				
Race									
White	Black	America		Asian	Multira	icial Other			
		His Yes	panic Orig	gin No					

Job Analysis Section

1. In the past year, has your administration given you a survey that gauges your desire to remain in your current teaching position?

YES NO

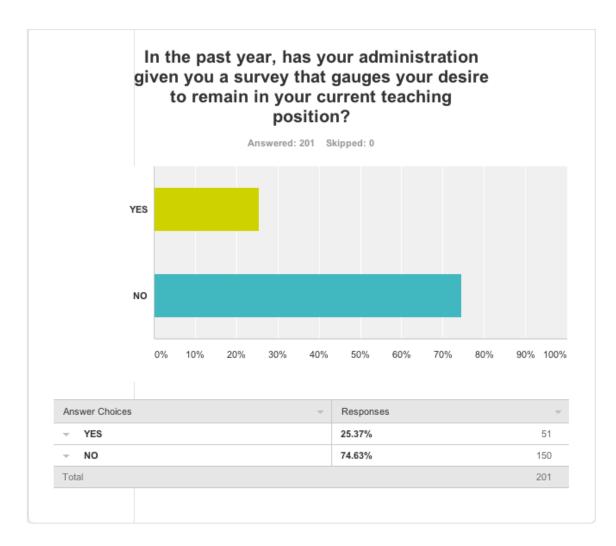
Below: If you answer to the first question was yes, please assign a numerical value for the following questions using the response scale; with 1-10 covering the possibilities between an absolute yes or no.

Response Scale									
1	2	3	4	5	6	7	8	9	10
No	Not Really		Somew	hat	Likely		Very Likely		Yes

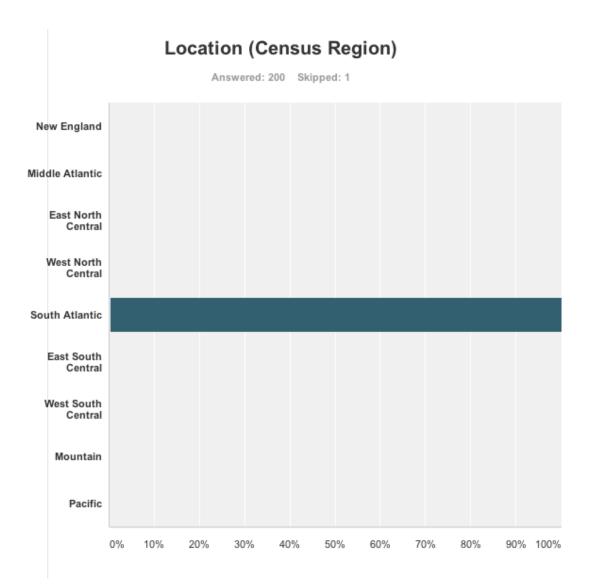
- 2. <u>I was given a voice in the administrative decisions that</u> followed the survey.
- 3. _____ The administrative decisions following the survey were applied equally among myself and my colleagues.

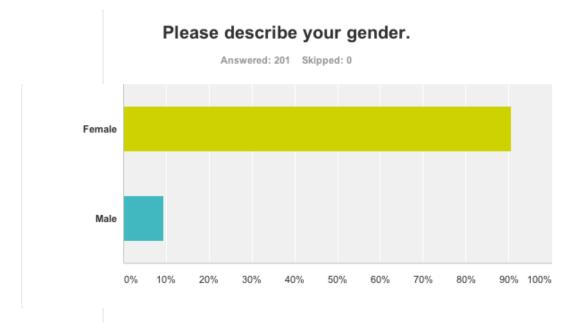
Additional Comments:

APPENDIX C RAW DATA

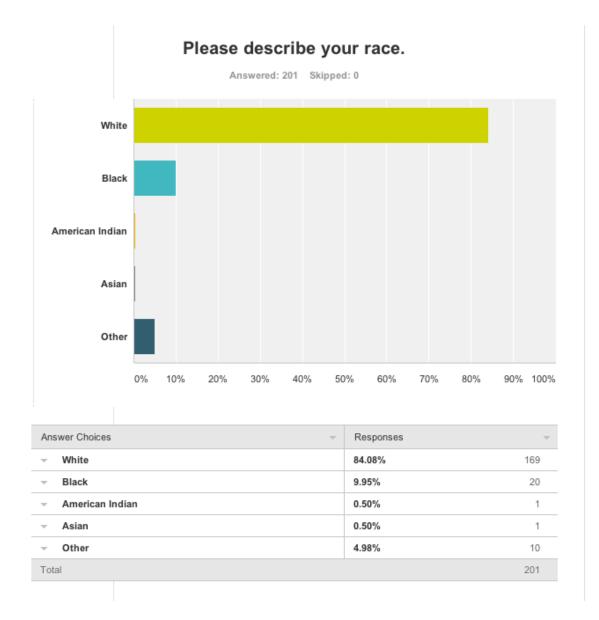


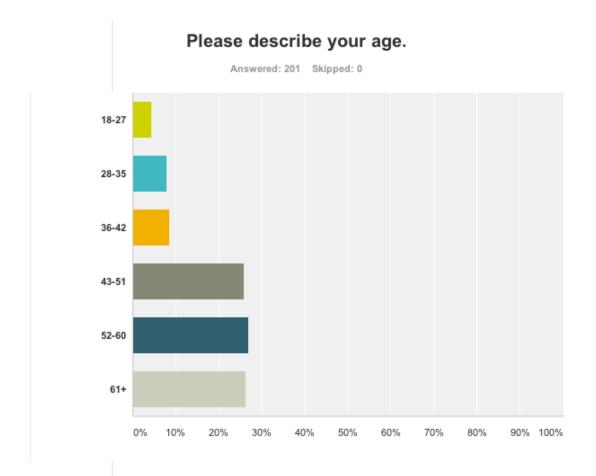
	Ÿ	1 v	2	3	4	5 v	6	7	8	9	10 🔻	Total 🔻	Average _v Rating
v a d	was given a roice in the Idministrative decisions that ollowed the survey	27.45% 14	1.96% 1	1.96% 1	3.92% 2	15.69% 8	3.92% 2	7.84%	9.80% 5	15.69% 8	11.76% 6	51	5.47
a d f s a e a a a	The Indministrative Idecisions following the survey were applied oqually imong myself and my colleagues	19.61% 10	5.88% 3	1.96% 1	1.96% 1	21.57% 11	5.88% 3	7.84%	7.84%	13.73% 7	13.73% 7	51	5.67





Answer Choices	Responses
- Female	90.55% 182
- Male	9.45% 19
Total	201





Answer Choices	 Responses 	,
18-27	4.48%	9
28-35	7.96%	16
36-42	8.46%	17
43-51	25.87%	52
52-60	26.87%	54
61+	26.37%	53
otal		201

APPENDIX D IRB APPROVAL LETTER



University of Central Florida Institutional Review Board Office of Research & Commercialization 12201 Research Parkway, Suite 501 Orlando, Florida 32826-3246 Telephone: 407-823-2901 or 407-882-2276 www.research.ucf.edu/compliance/irb.html

Approval of Exempt Human Research

From: UCF Institutional Review Board #1 FWA00000351, IRB00001138

To: Julio Devere

Date: March 27, 2014

Dear Researcher:

On 3/27/2014, the IRB approved the following activity as human participant research that is exempt from regulation:

Type of Review.	Exempt Determination
Project Title:	An Examination of Job Analysis: Developing Interdisciplinary
	Management Strategy Facilitative of Mitigating Propensities of
	Teacher Attrition
Investigator:	Julio Devere
IRB Number:	SBE-14-10108
Funding Agency:	
Grant Title:	
Research ID:	N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Kanielle Chap-

IRB Coordinator

REFERENCES

- Allen, D. (2011). Retaining Talent: Replacing misconceptions with evidence-based strategies. *Academy of management perspectives*. 5(2), 48-63.
- Andersen, T. (2005). The impact of office design on business performance. *Management services quarterly*, 49(3), 12-15.
- Arnold, J. (2004). The congruence problem in John Holland's theory of vocational choice. *Journal of occupational and organizational psychology*, 77(1), 95-109.
- Bodenhofer, H. (1997). The mobility of labor and the theory of human capital. *Journal of human resources*, 2(4), 431-446.
- Boyd, D. (2008). Who Leaves: Teacher attrition and student achievement. *National bureau* of economic research working paper series. 5(2), 22-37.
- Boyd, W. (1965). *The history of western education*. New York, NY: Barnes and Noble, Inc.
- Cacioppo, J. & Petty, R. (1986). Communication and persuasion: Central and peripheral routes to attitude change. New York, NY: Springer Publishing.
- Cacioppo, J. & Petty, R. (1979). Effects of message repetition and position on cognitive response, recall and persuasion. Journal of Personality and Social Psychology, (27), 97-105.
- Campbell, J., Frey M. & Cooper, C. (2007). Managerial dimensions of organizational health: The healthy leader at work. *Journal of management studies*, 44(2), 189-203.
- Chambers, R., McElligott, J. & Diller, E. (2011). A cure for presenteeism: Mandatory paid sick leave. *Employee benefit plan review* 4(2), 1-6.
- Chang, W. (2008). A synthesized model of markov chain and erg theory for behavior forecast in collaborative prototyping. *Journal of information technology theory and application*, 9(2), 45-63.
- Davidson, T. (1971). A history of education. New York, NY: Lenox Hill Publisher, Inc.
- Dull, M. (2010). Leadership and organizational culture: Sustaining dialogue between practitioners and scholars. *Public administrative review*, 12(6), 857-864.

- Evans, G. (2013). Rationalization for classic grounded theory. *Grounded theory review.* 12 (1), p. 1-19.
- Fisher, E. (2009). Motivation and leadership in social work management: A review of theories and related studies. *Administration in social work*, 33(2), 347-367.
- Flores, B. (2012). Identifying personal and contextual factors that attribute to attrition rates for public school teachers. *Education analysis policy archives*. 20(15), 1-32.
- Florida Department of Education (2013). *Demographics publication, 2013.* Retrieved from www.fldoe.org/eias/eiaspubs/word/tchdemo.doc
- Folger, R. & Skarlicki, D. (1999). Unfairness and resistance to change: Hardship as mistreatment. *Journal of organizational change*. 12 (1), p. 35-50.
- Frost, F. (1947). *A history of education*. New York, NY: Barron Publishing Co.
- Galetic, L. (2009). Transforming organizational structure and culture to sustain long-term competitiveness. *University of Zagreb business press*, 1(2), 911-923.
- Gill, D. (2010). Fairness and desert in tournaments. *Games and Economic Behavior*. 1(69), 346–364.
- Gronewold, U. (2013). Reporting self-made errors: The impact of organizational error management on climate and error type. *Journal of business ethics*, 117(2), 189-208.
- Gordon, P. (1989). *History of education: The making of a discipline*. Birmingham, UK: The Woburn Press.
- Hackman, R. & Oldham, G. (1980). Work redesign. New York, NY: Prentice Hall.
- Hanshushek, E. & Rivkin, S. (2010). Generalizations about the use of value-added modeling and measures of teacher quality. *American economic review*. 100(2), P. 267-271.
- Hasle, P. (2011). The working environment in small firms. *International small business journal*, 30(6), 622-639.
- Hemp, P. (2004). Presenteeism: At work but out of it. *Harvard business review*. 54(3), p. 49-58.
- Hoo, S. (2003). Understanding organizational culture: Development and learning in organizations. Training strategies for tomorrow, 17(5), 42-66.

- Janis I. (1972). *Victims of Groupthink: A psychological study*. Boston, MA: Houghton Mifflin, Inc.
- Johnson, D. (2011). Why are they leaving: A collection case study of teacher attrition during the first five career years. *Proquest education series*. 2(2), 1-43.
- Kaiser, A. (2011). Beginning teacher attrition and mobility: A longitudinal study. *National center for education statistics institute series*. 4(2), 2-27.
- Kaye, B. (1999). *Love 'em or lose 'em: Getting good people to stay*. San Francisco, CA: Berrett-Koehler publishers, Inc.
- Knight, E. (1940). *Twenty centuries of education*. San Francisco, CA: Ginn and Company.
- Lucia, C. (2004). The role of middle managers in the transmission and integration of organizational culture. *Journal of healthcare management*, 49(6), 393-404.
- Martens, M. (1999). Flexible work schedules with mental and physical health: A study of a working population with non-traditional working hours. *Journal of organizational behavior*, 20(1), 35-46.
- Maslach. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology*. (93), 498-512.
- McCaffrey, D. (2003). Evaluating value-added models for teacher accountability. *RAND corporate journal*. 8(2), p. 1-16.
- Murphy, J. (2005). *Connecting teacher leadership and school improvement*. Thousand Oaks, CA: Corwin Press.
- Ogilvie, K. (2009). Maslow and management: Universally applicable or idiosyncratic? *The canadian manager*, 34(4), 15-17.
- Patchen, M. (1977). *Questionnaire measures of employee motivation and morale: A report on their reliability and validity*. Ann Arbor, MI: University of Michigan Survey Research Center.
- Paige, M. (2012). Using value-added modeling (VAM) in high-stakes employment decisions. *Phi delta kappan*. 99(3), 29-32.
- Perks, R. (1993). Accounting and Society. London: Chapman & Hall.

- Pilar, M. (2002). Analysis of internal and external labor mobility: A model of job-related factors. *Personnel review*, 33(2), p. 222-239.
- Rubera, G., & Ahmet, K. (2012). Firm innovativeness and its performance outcomes: A meta-analytic review and theoretical integration. *Journal of marketing*, 76(1), 130-145.
- Sahin, F. (2012). The mediating effect of leader-member exchange on the relationship between Theory X and Y management styles and affective commitment: A multilevel analysis. *Journal of Management and Organization*. 18(2), 159–174.
- Scott, T. (2009). Instruments for exploring organizational culture. *Public administrative review*, 6(1), 1087-1094.

Sharman, Paul A. (2003). Bring On German Cost Accounting. *Strategic Finance*, 1(12), 1-13.

- Shim, S. (2012). Symmetric and asymmetric leadership cultures: A comparative study of leadership and organizational culture at Hyundai and Toyota. *Journal of world business*, 47(2), 581-591.
- Shore, T. (2004). Equity sensitivity theory: Do we all want more than we deserve? *Journal of managerial psychology*, 19(7), 722-728.
- Stevenson, R. (1999). Expectancy-value theory and predicting future employment status in the young unemployed. *Journal of occupational and organizational psychology*, 72(1), 101-106.
- Shniper, L. (2005). Research summary of occupational mobility. *Monthly labor review*, 128(12), p. 30-35.
- Tajfel, H. (1970). *Experiments in intergroup discrimination*. Oxford, UK: Oxford university press.
- Tajfel, H. (1974). Social identity and integral behavior. *Social science information*. 3(4), 1-21.
- Thatcher, A. (2012). The impact of a green building on employees' physical and psychological wellness. *Human and community development*, 41(1), 3816-3823.
- Thut, E. (1957). *The story of education: Philosophical and historical foundations*. New York, NY: McGraw-Hill Book, Co.

- Tyler, T. (1987). Conditions leading to value-expressive effects in judgments of procedural justice: A test of four models. Journal of personality and social psychology. 52 (2), p. 333-344.
- Ulich, R. (1968). History of educational thought. New York, NY: American Book, Co.
- Utley, D. (1997). The relationship between herzberg's two-factor theory and quality improvement implementation. *Engineering management journal*, 6(3), 1-16.
- Vygotsky, L (1962). *Thought and language*. Cambridge, MA: MIT Press.
- Walley, L. (1998). Deception in selection: strategies in human resource management. New York, NY: John Wiley and Sons.