

Walden University ScholarWorks

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies Collection

2016

Faculty Career-Enhancing Training Opportunity Effects on Perceived Organizational Support, Job Satisfaction, and Organizational Commitment

Laura Pateri Bryant Walden University

Follow this and additional works at: https://scholarworks.waldenu.edu/dissertations Part of the <u>Psychology Commons</u>

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Laura Bryant

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

Review Committee Dr. John Schmidt, Committee Chairperson, Psychology Faculty Dr. Catherine Kwantes, Committee Member, Psychology Faculty Dr. Linda Whinghter, University Reviewer, Psychology Faculty

> Chief Academic Officer Eric Riedel, Ph.D.

> > Walden University 2016

Abstract

Faculty Career-Enhancing Training Opportunity Effects on Perceived Organizational

Support, Job Satisfaction, and Organizational Commitment

by

Laura Pateri Bryant

MA, Walden University, 2009 BS, University of West Florida, 2004

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology

Walden University

September 2016

Abstract

Research has shown that organizations outside of academia that provide career-enhancing training opportunities have employees with greater levels of perceived organizational support, job satisfaction, and organizational commitment than do organizations without such training. Increasingly, colleges and universities are looking to attract and retain the most talented individuals; providing opportunities for growth through career-enhancing training opportunities may be one way to do so. This study examined whether or not faculty at institutions providing career-enhancing training opportunities showed a similar positive relationship between perceived organizational support, job satisfaction, and organizational commitment as have employees at organizations outside of academia; this study also examined if those levels varied by gender. A sample of 90 faculty members at both private and public academic institutions was recruited via LinkedIn and the Walden Participant Pool and were administered a 13-item demographic questionnaire, followed by The Survey of Perceived Organizational Support, The Job Satisfaction Survey, and The Three Component Model of Organizational Commitment Survey. Both a correlation and moderation analysis showed no significant relationship between the variables, suggesting the need for a larger sample. Although this study had non-significant results, it contributes to positive social change by promoting discussion of effective ways to improve faculty recruitment and retention and by highlighting the need for further research into the relationship between career enhancement and perceptions of organizational support, job satisfaction, and organizational commitment.

Faculty Career-Enhancing Training Opportunity Effects on Perceived Organizational

Support, Job Satisfaction, and Organizational Commitment

by

Laura Pateri Bryant

MA, Walden University, 2009

BS, University of West Florida, 2004

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology

Walden University

September 2016

Dedication

This work is dedicated to my mother, Gina, without whose sacrifices and tireless selflessness, I would have never been able to make it this far.

I would also like to thank Dame Agatha Christie because her Marple and Poirot exploits gave me so much joy in the face of such a complex and overwhelming task. Poirot helped me learn to always use my "little grey cells" even when I was exhausted and Miss Marple taught me to see that things are the same no matter where you are, pay attention to the immediate world around you and you can understand the workings of the universe.

Acknowledgments

First I would like to thank any higher or enlightened being who gave me the strength to complete this project. Without your support and gentle encouragement, I would not have been able to keep going when the light at the end of the tunnel seemed to be getting smaller and not larger.

Second I would like to thank my mother who has always been there for me regardless of what I was going through. I was always a curious child, sometimes too curious, but you nurtured that curiosity and encouraged me to pursue my goals however difficult or impossible they might have appeared. Consequently I developed a "can do" attitude and am still convinced that failures only help me grow stronger and wiser.

To my sister Taura "TB the Great," you have been an inspiration to me through your battle with Lupus. Seeing you fight every day to try and have some semblance of a normal life continues to remind me that I can always "suck it up" a little bit longer and get through.

To my baby sibling Kaura "Tater Tot," I have never given up on you and will continue to try to be a positive role model for you to strive towards. Hopefully one day you will surpass me.

To Crystal Dawn Connors, a better friend I could not have asked for. Giving up your free time so we could muddle through my statistical analyses, until the wee hours of the morning, even though we both had to be up early, means the world to me. When I needed you, you rogered up. How important that was to me I don't think you will ever know. I would also like to thank my committee members Dr. Catherine Kwantes and Dr. Linda Whinghter; your guidance and support through this process has been invaluable. Thank-you for working so quickly to get my revisions and corrections back to me and for being so diligent in your review, ensuring that my final dissertation version would be of a quality worthy of Walden's academic standards.

Finally, I would like to thank Dr. John Schmidt. Without knowing it many years ago you challenged me to begin this process. Determined to prove you wrong, I made it to this point. Through it all you have been the mentor I have always needed, providing me with support, encouragement, and a swift kick when necessary. I never realized that you believed in me until much later when I understood you did not think I was living up to my potential...thank-you does not seem like enough.

List of Tables	V
List of Figures	vi
Chapter 1: Introduction to the Study	1
Introduction	1
Background of the Study	5
Problem Statement	
Purpose of the Study	9
Nature of the Study	9
Research Questions and Hypotheses	
Theoretical Base	11
Organizational Support Theory	
Job Characteristics Model	
Definition of Terms	15
Assumptions	
Limitations	
Significance of the Study	21
Summary and Transition	
Chapter 2: Literature Review	
Introduction	
Literature Search Strategy	
Perceived Organizational Support	

Table of Contents

Perceived Supervisor Support	
Psychological Contract	
Social Exchange Theory	
Norm of Reciprocity	
Training Opportunities	
Job Satisfaction	
Job Characteristics Model	
Psychological Contract	41
Increasing Job Satisfaction	42
Organizational Commitment	42
Affective Commitment	45
Normative Organizational Commitment	
Affective and Normative Commitment Relationship	46
Continuance Organizational Commitment	47
Organizational Commitment and Perceived Organizational Support	47
Organizational Commitment and Job Satisfaction	48
Female Faculty and Tenure	49
Summary and Transition	52
Chapter 3: Research Method	55
Introduction	55
Research Design and Approach	55
Target Population and Sample	56

Instrumentation	56
Demographic Questionnaire	56
Survey of Perceived Organizational Support	57
Job Satisfaction Survey	59
Three Component Model of Employee Commitment Survey	60
Research Questions and Hypotheses	61
Data Collection	63
Statistical Analysis	64
Protection of Human Participants	69
Dissemination of Findings	70
Summary and Transition	70
Chapter 4: Results	71
Introduction	71
Participant Demographics	71
Descriptive Statistics	75
Correlation Analysis	76
Multiple Regression Assumptions	76
Multiple Regression Analysis	80
Research Question 1	80
Research Question 2	81
Research Question 3	82
Research Question 4	

Research Question 5	85
Research Question 6	87
Summary and Transition	90
Chapter 5: Discussion, Conclusions, and Recommendations	93
Introduction	93
Interpretation of Findings	95
Implications for Social Change	97
Limitations of the Study	99
Recommendations for Further Study	100
Conclusion	102
References	103
Appendix A: Participant Letter of Invitation to the Study	125
Appendix B: Demographics Survey	127
Appendix C: Permission to Use the Survey of Perceived Organizational Support	129
Appendix D: 8-Item Survey of Perceived Organizational Support	130
Appendix E: Permission to Use the Job Satisfaction Survey	131
Appendix F: Job Satisfaction Survey	132
Appendix G: Permission to Use the TCM Organizational Commitment Survey	134
Appendix H: Boxplots, Histograms, P-P plots, and Scatterplots	135

List of Tables

Table 1. Participant Demographics	73
Table 2. Academic and Employment Demographics	74
Table 3. Descriptive Statistics for CETO and Outcome Variables	76
Table 4. Predictor and Outcome Variable Correlational Analysis	76
Table 5. Case Processing Summary for Predictor and Outcome Variables	77
Table 6. Shapiro-Wilk's Test Results	80
Table 7. Regression With CETO Predicting POS	81
Table 8. Regression With CETO Predicting JS	82
Table 9. Regression With CETO Predicting AC	83
Table 10. Regression With CETO Predicting CC	84
Table 11. Regression With CETO Predicting NC	84
Table 12. Moderation Analysis of Gender and CETO Predicting POS	85
Table 13. Moderation Analysis of Gender and CETO Predicting JS	87
Table 14. Moderation Analysis of Gender and CETO Predicting AC	88
Table 15. Moderation Analysis of Gender and CETO Predicting CC	89
Table 16. Moderation Analysis of Female Gender and CETO Predicting NC	90
Table 17. Summary of Hypothesis Testing Results	97

List of Figures

Figure H1. Boxplot for Predictor and Outcome Variables Showing Outliers	135
Figure H2. Boxplot for Predictor and Outcome Variables Without Outliers	136
Figure H3. Histogram for POS.	137
Figure H4. Normal P-P Plot for CETO Predicting POS	138
Figure H5. Residuals Scatterplot for CETO Predicting POS.	139
Figure H6. Histogram for JS	140
Figure H7. Normal P-P Plot for CETO Predicting JS.	141
Figure H8. Residuals Scatterplot for CETO Predicting JS	142
Figure H9. Histogram for ACS	143
Figure H10. Normal P-P Plot for CETO Predicting AC	144
Figure H11. Residuals Scatterplot for CETO Predicting AC.	145
Figure H12. Histogram of CC	146
Figure H13. Normal P-P Plot for CETO Predicting CC	147
Figure H14. Residuals Scatterplot for CETO Predicting CC.	148
Figure H15. Histogram for NC.	149
Figure H16. Normal P-P Plot for CETO Predicting NC	150
Figure H17. Residuals Scatterplot for CETO Predicting NC.	151

Chapter 1: Introduction to the Study

Introduction

The world is becoming increasingly more global and interconnected. Businesses have had to change their business model to be able to compete globally, thus requiring organizations to constantly look for ways to improve quality and productivity (Hom et al., 2009). Such efforts must be balanced against their need to recruit and retain a talented pool of individuals in order to maintain competitiveness (O'Reilly & Pfeffer, 2000; Tansky & Cohen, 2001). Global interconnectedness means that people who previously would neither have communicated nor done business together are now working together and interacting on a daily basis (Bikson, Treverton, Moini, & Lindstrom, 2003).

The information technology age has changed the way that many people go about their daily lives and how organizations do business (Dupre & Day, 2007). Some organizations have discovered that women can bring a different perspective to the workplace and that they are just as useful as men in helping an organization succeed (Eagly, 2007). This realization, along with the passage of affirmative and equal rights laws that have been enacted in the United States and the looming leadership deficit that will occur when the baby boomers being to retire, means that talented, qualified, competent female employees are in demand (Sanchez-Hucles & Davis, 2010; Treverton & Bikson, 2003).

Research has shown there are significant differences between male and female employees that include their personal and business needs, desires, definitions of success, and styles of leadership (Carlson & Mellor, 2004; Cheung & Halpern, 2010; Eagly & Chin, 2010; Voydanoff, 1980). One reason this difference exists includes the fact that there are few female employees at the higher levels of organizational management, in part due to a difference in leadership style that has been documented repeatedly in the literature (Cheung & Halpern, 2010).

A specific team-oriented leadership style commonly associated with many female leaders may be more adaptive in collectivist-oriented cultures or when projects require cooperative team leadership (Eagly, Johannesen-Schmidt, & van Engen, 2003). Women tend to use a transformational leadership style rather than the transactional style favored by most male leaders (Eagly et al., 2003). This fosters better communication among employees in organizations with female managers (Cheung & Halpern, 2010; Eagly et al., 2003). However, transformational leadership could be less understood and welcomed by male leaders in an organization that expects managers to use a transactional leadership style. Despite an abundance of research consistently showing that companies that are high performers in their sector have a larger than average number of female executives and/or board members, this continues not to be the norm (Joy, Carter, Wagner, & Narayanan, 2007). In fact, increasing the number of females in on a team has been found to result in higher productivity for an entire work team instead of having an all-male work group (Woolley & Malone, 2011).

Census data indicate women still earned on average 77 cents for every dollar earned by males in 2011 (DeNavas-Walt, Proctor, Smith, & U.S. Census Bureau, 2012). Although they may have the same credentials, researchers have found that newly graduated women with the same credentials as male colleagues initially make less (DeNavas-Walt et al., 2012). Unfortunately, this gap will continue because future raises and salaries are based off of what an individual currently makes. Estimates suggest that over a lifetime this represents \$400,000 in lost wages for a female worker (DeNavas-Walt et al., 2012). These data suggest that women are still not in a position to be treated equally with their male counterparts.

In postsecondary education, tenure is equated with seniority, respect, and job security. The number of individuals who attain tenure at colleges and universities in the United States is small, and even smaller are the number of female faculty who are in this group (August & Waltman, 2004; National Science Foundation, National Center for Science and Engineering Statistics, 2015). As of 2008, there were 651,000 employed individuals in the United States with a doctoral degree; with 269,400 (41%) of these doctoral recipients teaching at a 4-year postsecondary institution (National Science Foundation, National Center for Science and Engineering Statistics, 2015). Of the 269,400 faculty members, 178,600 (66%) are male. Among graduates with less than 10 years of experience who teach at 4-year postsecondary institutions, 53,000 (56%) are male and 42,400 (45%) are female (National Science Foundation, National Center for Science and Engineering Statistics, 2015). However, when comparing males who have held their degree for over 10 years to females with the same experience, 124,700 men and only 48,300 females were found teaching (National Science Foundation, National Center for Science and Engineering Statistics, 2015).

Consistently women in postsecondary education are less likely to attain tenure during their career as a professor (Callister, 2006; Samble, 2008). Women are more likely than men to instead be part-time faculty, or adjunct faculty; neither position is as lucrative or respected as a full-time tenured faculty appointment (Harper, Baldwin, Gansneder, & Chronister, 2001; National Science Foundation, National Center for Science and Engineering Statistics, 2015). Based on 2008 data collected about faculty members in the United States, there were a total of 94,100 individuals who are full-time professors, with 75,000 (80%) of those faculty members being male (National Science Foundation, National Center for Science and Engineering Statistics, 2015). This fact is surprising considering the large number of women who receive PhDs each year. In 2008, a total of 452,200 men and 199,900 women with doctoral degrees were employed (National Science Foundation, National Center for Science and Engineering Statistics, 2015). This is almost a 2 to 1 ratio, but those numbers are not reflected at the postsecondary institutional level for full-time professors (National Science Foundation, National Center for Science and Engineering Statistics, 2015).

The literature regarding female faculty members varies in explanations as to why the tenure disparity among male and female faculty members still exists (Winkler, 2000). Some researchers have suggested that there is a "motherhood penalty," the idea that female faulty who have children and might therefore be unable to devote as much time to research and grant-writing may be punished because their contributions are seen as less valuable than those who are consistently awarded grants and published in peer-reviewed journals (Benard & Correll, 2010; Correll, Benard, & Paik, 2007; Winkler, 2000). Others have found that female faculty members publish less frequently, but their research may be of higher quality than some of the male faculty (Perna, 2001). If a college or university values quantity, however, and not necessarily quality when determining who should have tenure, male professors may win over female professors because of publishing frequency (Perna, 2001; Winkler, 2000). Finally, there are studies that have noted female faculty consistently voice concerns over lack of access to informal mentoring networks to which male faculty have access (August & Waltman 2004; Harper et al., 2001). In these studies, female faculty cited missed training and mentoring opportunities as a reason for not being as successful in the faculty careers as they would like to be (August & Waltman, 2004; Harper et al., 2001). Overall, the research has shown that female faculty cited a lack of a clear, formal, structured, process for attaining tenure, which makes the process confusing and difficult to navigate (August & Waltman, 2004; Perna, 2001).

Research has shown that training and development increases an employee's job mobility and improves an employee's career prospects (Shore, Bommer, & Shore, 2008). Since training and access to informal mentoring networks is one reason female faculty members have stated they are less likely to attain tenure and also stay in the tenure track, in this study, I sought to examine if there was a correlation between the frequency of training opportunities afforded to female faculty and their current perceived organizational support, job satisfaction, and organizational commitment.

Background of the Study

One of the biggest assets of organizations has always been their workforce (Allen, Bryant, & Vardaman, 2010; Dupre & Day, 2007). Employees are seen as valuable for many reasons, including their knowledge and ability to contribute to an organization's goals (Dupre & Day, 2007; O'Reilly & Pfeffer, 2000). Further, more dynamic components of the workplace like downsizing, virtual work, telecommuting, mergers between businesses, and others mean that employee-organization relationships and attachments will be affected in some way (Frank, Finnegan, & Taylor, 2004; Van Dick, Becker, & Meyer, 2006). For those reasons and many others, leaders of organizations have sought to capitalize on their employee workforce by understanding what makes one employee stay with a company while another employee leaves (Weng, McElroy, Morrow, & Liu, 2010). To that end, there has always been an interest in the various ways in which employees interact with their organization and how those interactions affect the employees' commitment to their organization, their perception of how well their organization supports them, and their satisfaction with their job/position within the organization (Coyle-Shapiro, Shore, Taylor, & Tetrick, 2004; Levinson, 1965; Rousseau, 1998).

Globalization and the competitiveness it brings to the workforce and market are increasing the desire of organizations to understand the employee-organization relationship and how it can both positively and negatively affect the success of the organization's mission (Eagly & Chin, 2010). Forty years ago, an organization could assume that employees would remain with the company because of a strong commitment to the organization; today, employees have access to career growth opportunities outside of their organization and will leave their current organization if they feel those opportunities are not great enough (Hu, Weng, & Chen, 2008; Rousseau, 1998). Because of the competitive state of global economics, organizations are looking to retain their talent by developing relationships with them and having their employees become committed to the organization (Van Dick, Hirst, Grojean, Wieseke, 2007; Weng et al., 2010).

In today's market, losing employees to the competition can be extremely costly to organizations, spurring increased interest in retention (Kacmar, Andrews, Van Rooy, Steilberg, & Cerrone, 2006; Karsan, 2007; Watrous, Huffman, & Pritchard, 2006). Turnover has been a persistent problem in all organizations and is associated with several direct and indirect costs to the organization (Abbasi & Hollman, 2000; Watrous et al., 2006). These costs include, but are not limited to, the cost of advertising for a new position, recruiting, selecting, hiring, training, and terminating an employee (Abassi & Hollman, 2000). It can also have indirect costs for the organization, including declining morale and a disruption of communications within the organizations, thereby damaging the social structure of the organization (Watrous et al., 2006). The interest from an organizational perspective in how an employee develops a relationship with an organization and what type is developed prompted a multidecade study of organizational commitment (Griffeth, Hom, & Gaertner, 2000).

Organizational commitment is affected by both perceived organizational support and job satisfaction, and researchers have suggested that these pieces are sufficiently distinct to warrant dedicated research on each individually (Chiu & Chen, 2005; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Rhoades, Eisenberger, & Armeli, 2001). Based on the literature, organizational commitment, perceived organizational support, and job satisfaction all work to affect the total employee experience and determine how engaged an employee would be with his or her organization (Chiu & Chen, 2005; Eisenberger et al., 2010; Rhoades et al., 2001). How likely the employee is to remain with an organization and how motivated the employee will be to engage in behaviors that will help the organization achieve its short and long term goals is tied to these three factors (Chiu & Chen, 2005; Eisenberger et al., 2010). The increasing costs of turnover have forced many organizations to invest a greater amount of time and resources into understanding the relationships among these factors (Watrous et al., 2006).

Problem Statement

Research has shown that there is a link between an individual's perceived organizational support, job satisfaction, and organizational commitment (Eisenberger et al., 2010; Meyer et al., 2002; Rhoades & Eisenberger, 2002). However, relevant research that addresses these issues in relation to gender is not readily abundant in the literature. Additionally, there have only been a few studies that have examined the effect of career-enhancing training opportunities (CETO) on perceived organizational support, job satisfaction, and organizational commitment, and there are no studies that have examined the effect of CETO on perceived organizational support, job satisfaction, and organizational commitment and the interactions between these variables all at the same time (Long, Fang, & Ling, 2002; Ng, Butts, Vandenberg, Dejoy, & Wilson, 2006; Weng et al., 2010). For the most part, these issues have been addressed and examined based on Caucasian males in the United States. Examining CETO afforded to women by an organization may provide some insight into changes that organizations may need to make

to their current system and benefits for female employees if they wish to retain their female employees (Voydanoff, 1980).

Purpose of the Study

The purpose of this research was to determine if training opportunities offered by an organization affected employees' organizational commitment, perceptions of organizational support, and job satisfaction, thereby influencing their likelihood of staying with an organization when compared to men. This study adds to the research by providing information about the needs of women in organizations, thereby allowing other organizations that desire to attract and retain more female employees to have a better understanding of some factors that may affect its retention success.

Nature of the Study

A quantitative approach was used to examine the degree to which perceived organizational support (POS), organizational commitment (OC), and job satisfaction (JS) were affected by an employee's access to CETO. Faculty members from 4-year postsecondary institutions were surveyed to determine their level of POS, JS, and OC. The faculty members also answered questions concerning the number of CETO their organization had offered them or offered to pay for on behalf of the faculty members. The data collected from both male and female faculty members were analyzed using multiple regression analyses to see if the CETO offered by the college to the faculty members affected their level of POS, JS, and OC and what effect, if any, gender had on the relationship between CETO and POS, JS, and OC.

Research Questions and Hypotheses

The following research questions and associated hypotheses are derived from a thorough review of existing literature in the areas of POS, JS, and OC.

Research Question 1: Is there a relationship between postsecondary faculty CETO and POS?

 H_01 : There is no relationship between the number of CETO offered to postsecondary faculty and POS as assessed by the Survey of Perceived Organizational Support (SPOS).

 H_a1 : There is a relationship between the number of CETO offered to postsecondary faculty and POS as assessed by the SPOS.

Research Question 2: Is there a relationship between postsecondary faculty CETO and JS?

 H_02 : There is no relationship between the number of CETO offered to postsecondary faculty and JS as assessed by the Job Satisfaction Survey (JSS). H_a2 : There is a relationship between the number of CETO that are offered to postsecondary faculty and JS as assessed by the JSS.

Research Question 3: Is there a relationship between postsecondary faculty CETO and OC?

 H_03 : There is no relationship between the number of CETO offered to postsecondary faculty and OC as assessed by the TCMECS. H_a3 : There is a relationship between the number of CETO that are offered to postsecondary faculty and OC as assessed by the TCMECS. Research Question 4: Does gender moderate the relationship between postsecondary faculty CETO and POS?

 H_04 : Gender does not moderate the relationship between the number of CETO offered to postsecondary faculty and POS as measured by the SPOS.

 H_a 4: Gender moderates the relationship between the number of CETO offered to postsecondary faculty and POS as measured by the SPOS.

Research Question 5: Does gender moderate the relationship between

postsecondary faculty CETO and JS?

 H_05 : Gender does not moderate the relationship between the number of CETO offered to postsecondary faculty and JS as assessed by the JSS.

 H_a5 : Gender moderates the relationship between the number of CETO offered to postsecondary faculty and JS as assessed by the JSS.

Research Question 6: Does gender moderate the relationship between

postsecondary faculty CETO and OC?

 H_06 : Gender does not moderate the relationship between the number of CETO

offered to postsecondary faculty and OC as assessed by the TCM ECS.

 H_a6 : Gender moderates the relationship between the number of CETO offered to postsecondary faculty and OC as assessed by the TCM ECS.

Theoretical Base

Two different theories support the research for this study. The first,

organizational support theory (OST), relates to all three of the predictor variables of the study: POS, JS, and OC. The second theory, the job characteristics model (JCM), was

developed by Hackman and Oldham in 1976 and relates most easily to JS. Both theories, however, explain the underlying thoughts of POS, JS, and OC and serve as a starting point for understanding the literature presented in Chapter 2.

Organizational Support Theory

According to OST, employees of an organization personify the organization; attributing human-like characteristics to a nonliving entity helps the employee meet socioemotional needs (Eisenberger et al., 1986). Employees attempt to determine the extent to which their organization cares about their well-being both as an individual and in the context of their various group memberships (Eder & Eisenberger, 2008; Rhoades & Eisenberger, 2002). Once this level of caring has been established, the employee reciprocates the POS by either increasing or decreasing his or her commitment to his or her organization through loyalty and performance (Aselage & Eisenberger, 2003; Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001).

The degree to which work experiences lead to the development of POS is dependent upon the employees' belief that the organization has treated them favorably or unfavorably, and whether that treatment was a result of the organization's free will or if the organization was forced to act in that manner (Edwards, 2009). Additionally, the number of resources used or difficulty faced by the organization to bestow favorable treatment on an employee can increase and affect POS (Aselage & Eisenberger, 2003). OST suggests that positive treatment from an organization that is geared toward meeting an employee's specific need is more valuable to an employee than one that meets general employee needs (Edwards, 2009; Eisenberger et al., 2010). OST posits that employees determine the extent to which their treatment by a supervisor is representative of how valuable the employee is to an organization (Eisenberger et al., 2010). To accomplish this, the employee assesses his or her supervisors organizational embodiment (SOE), the extent that his or her supervisor embodies the same beliefs, values, and mission as the organization (Eisenberger et al., 2010). Those supervisors who appear to have a large degree of influence within the organization are viewed as having a higher level of SOE. Therefore CEOs and upper-level management are considered to be highly representative of the organization because they determine and implement organizational policies and procedures (Erdogan & Enders, 2007). By providing employees with opportunities to receive favorable rewards, supervisors, and by extension, organizations, nonverbally communicate how much they value the employee and his/her contributions to the organization (Rhoades & Eisenberger, 2002).

Job Characteristics Model

Hackman and Oldham (1976) suggested the JCM as a precursor to explaining JS. According to JCM (Oldham, Hackman, & Pearce, 1976), JS is affected by five job dimensions:

- 1. Skill variety: The degree to which an employee's job requires him or her to use multiple skills to perform a variety of tasks and activities.
- Task identify: The degree to which a job requires an employee to produce a complete work or piece of work that is identifiable according to some measure.

- Task significance: The extent to which an employee's job has an effect on those who the employee cares about both inside and outside of the organization.
- 4. Autonomy: The degree to which an employee's job allows him or her the freedom to complete tasks, activities, and meet the organization's goals in a manner that suits him or her best, giving the employee the freedom to use discretion to accomplish the job.
- 5. Feedback: The degree to which an employee is provided with clear and direct information regarding his or her performance and how effective he or she is in accomplishing tasks.

All of these factors combined interact to increase or decrease an employee's JS.

According to the JCM, JS, employee motivation, and work performance are influenced by the complexity and enrichment of the employee's job within the organization (Hackman & Oldham, 1975; Wright & Kim, 2004). The five factors influence three psychological states of the employee: meaningfulness of his or her work, responsibility for his or her work and its outputs, and the knowledge the employee has of the outputs of his or her work activities (Hackman & Oldham, 1976; Oldham et al., 1976). These three psychological states of the employee influence work related behaviors that have a direct impact on the organization like JS, absenteeism, motivation, and work effectiveness (Hackman & Oldham, 1976).

Definition of Terms

Affective commitment (AC): The bond that an employee believes he or she has with the organization. This component of OC can be thought of as an employee's loyalty to his or her organization (Griffin, Hogan, Lambert, Tucker-Gail, & Baker, 2010). It is strongly correlated with JS, organizational citizenship behaviors, and absenteeism (Johnson & Chang, 2006; Meyer, Becker, & Vandenberge, 2004).

Career-enhancing training opportunities (CETO): Educational opportunities that would not only enhance an employee's career in the current organization, but could also provide training that would be relevant to overall personal development. Examples include attending professional conferences, attending collegiate classes during or after working hours, paying for employees to take college courses, and training employees in new procedures and technologies in their field. This definition does not refer to training that is mandatory for compliance with laws or company regulations (i.e., sexual harassment training, information assurance awareness training, timecard entry, or fire safety).

Continuance commitment (CC): An employee's belief that his or her skill set, training, or experience is only valuable at his or her current organization (Mankanjee, Hartzer, & Uys, 2006). It is a combination of two different features of an employee's belief about his or her circumstances: The availability of viable alternative organizations to go to and the level of sacrifice they will have to make, if any, to go to another organization (Cassar & Briner, 2011). CC is one of three factors that make up OC. *Job satisfaction* (JS): The employee's emotional feeling regarding his or her job. It has been linked to both POS and OC (Ganzach, Pazy, Ohayun, & Brainin, 2006). This differs from POS because it may decline independent of the perceived support an employee feels he or she receives from the organization (Griffin, Hogan, Lambert, Tucker-Gail, & Baker, 2010; Yoon & Thye, 2002). JS is affected by POS and is a precursor to OC because an unsatisfied employee will not be a committed employee (Baranik, Roling, & Eby, 2010; Rhoades & Eisenberger, 2002).

Moderator variable: Any variable (either qualitative or quantitative) that affects the direction and/or the strength of the relationship between a predictor variable and an outcome variable (Baron & Kenny, 1989).

Norm of reciprocity: The actions of an individual in a relationship are based on the perceived actions of the other individual in the relationship (Mitchell & Ambrose, 2007). In the case of an employee-organization relationship, the individual reacts to and treats the organization in a manner that is largely influenced by the employee's perception of treatment by the organization (Allen, Shore, & Griffeth, 2003; Mitchell & Ambrose, 2007; Van Knippenberg, Van Dick, & Tavares, 2007).

Normative commitment (NC): A factor of OC is a commitment that an employee has to the organization due to similar morals and/or values with the organization (Meyer, Becker, & Van Dick, 2006). High levels of this type of commitment make an employee more likely to stay with the organization because he or she is free to express his or her own morals and values that are in line with those of the organization (Watrous et al., 2006).

Organizational citizenship behavior (OCB): Extra-role behaviors exhibited by the employee either directly or indirectly that are not necessarily formally recognized by the organization's employee recognition system but that increase the effective performance of the organization (Messer & White, 2006; Yun, Takeuchi, & Liu, 2007). This behavior may be exhibited only when the employee has a desire to improve his or her self-image to management (Podsakoff, Mackenzie, Paine, & Bachrach, 2000; Rioux & Penner, 2001). However, regardless of the reason, OCB has been associated with increased organizational effectiveness, productivity, and employee JS (Messer & White, 2006).

Organizational commitment (OC): The level to which an employee is committed to the success of his or her organization (Parnell & Crandall, 2003). The employee can show this in many different ways including, retention, attendance, and helpfulness to coemployees, desire to take on additional tasks to benefit the organization, and job performance (Eisenberger et al. 2010; Herrbach, 2006; Meyer et al., 2006; Meyer & Herscovitch, 2001; Meyer et al., 2002). OC is composed of three different factors: affective commitment, continuance commitment, and normative commitment.

Organizational justice: The belief by an employee that his or her organization is fair and will act in a manner that is consistent with fairness and justice (Eisenberger, Cummings, Armeli, & Lynch, 1997). This means the employee looks to the organization to comply with laws regarding the employee and his or her coemployees, and also that the organizations shows that it follows fair hiring practices, promotion practices, reward practices, and punishment practices (Loi, Hang-yue, & Foley, 2006). Organizations that

fail to do so risk their employees having low faith in the organization as a fair entity (DeConick & Johnson, 2009).

Organizational support theory (OST): This theory suggests that all employees, in an attempt to understand their organization, attribute human-like characteristics to their organization (Aselage & Esienberger, 2003, Eder & Eisenberger, 2008; Levinson, 1965). In doing so, the employee can hopefully provide him or herself with a measure of predictability concerning the organization's actions and reactions. In an attempt to determine in what manner an organization will react to a specific employee, the employee determines to what degree he or she feels the organization cares about him or her (Panaccio, & Vandenberghe, 2011). This allows the employee to determine how his or her actions, both positive and negative, might be construed by the organization and therefore affect the employee (Coyle-Shapiro & Conway, 2005; Edwards, 2009).

Perceived organizational support (POS): An experience-based attribution of an employee concerning the extent to which the organization he or she works for cares about well-being and success (Ganzach et al., 2006). This is a perception that is unique to each employee and is subject to change at any time (Armstrong-Stassen & Ursel, 2009; Eisenberger et al., 2001).

Psychological contract: A nonphysical contract that an employee develops when he or she begins to work for an organization (Cassar & Briner, 2011). These contracts may vary from employee to employee even among employees who are in the same job position (Suazo, Martinez, & Sandoval, 2009). Because the contract is developed by each employee based on his or her needs and desires, the contract may not be fulfilled even though the organization is treating two employees in the exact same manner (Lambert, 2011; Suazo et al., 2009).

Social exchange theory: Employees form relationships with organizations to maximize their own gain (Ganzach et al., 2006). The relationship is very similar to one that an individual would form with another human being (Cropanzano & Mitchell, 2005).

Supervisors organizational embodiment (SOE): The level to which an employee identifies his or her supervisors with the organization based on the perceived amount of influence and power the supervisor has within an organization (Gentry, Kuhnert, Mondore, & Page, 2007). Additionally, the employee determines to what extent the supervisor's values and objectives correlate with those of the organization (Eisenberger et al., 2010).

Assumptions

In this study, I assumed that the individuals who participated were being truthful about their work experiences and their current work status. Individuals may have been concerned that the information might somehow reach their employer and therefore be less inclined to fully disclose their feelings in the surveys. Additionally, being currently employed is an integral part of the results of the study since an individual must be employed to discuss his or her experiences and decisions. I also assumed that the individuals who were participating in the study wished to do so voluntarily and were not being pressured by another individual or the organization that they work for. Forcing participation in the study may have had negative consequences including an increase in error and possible indications of significance when there was in fact no significance. Finally, I assumed that all of the individuals who participated were actual faculty members at a 4-year postsecondary institution. Since the individuals were allowed to access the survey from external website, there was no guarantee that the individuals were actually faculty members.

Limitations

One of the major limitations of this study was that there are many different factors that can affect POS, JS, and OC. Although I sought to examine one area that may have had a significant influence on these variables, there was a strong possibility that the results may have been affected by other variables that were not accounted for in this study. These factors have been shown in research to have relationships with the variables that were being measured in the study.

Using self-report data could have limited this study by potentially skewing the results. Often when individuals are asked to self-report, they try and provide answers that they know are more socially acceptable. Known as the social desirability bias, the participants may attempt to provide the answers to the survey that make them seem more appealing and socially acceptable. Research has shown that individuals will lie even if they are told they have complete anonymity because they do not wish to violate social norms or feel as though they could be judged negatively (Krosnick, 1999). This could have been problematic if the participants did not wish to appear disgruntled or angry, especially given that the survey was about their workplace. Additionally, the participants may have had concerns that the information they provided would be shared with their organization in some manner (Donaldson & Grant-Vallone, 2002). Although participants

were informed that their answers would be completely confidential, they may still have had lingering concerns and therefore may not have been fully honest in their answers when taking the survey.

Another limitation was the ability of the study to generalize. Although women from different institutions were sought, the experiences of these women may not have reflected the majority of females employed at 4-year institutions. Although every attempt was made to gather information from multiple institutions, there was a possibility that one or two institutions were more prominent in the study than others. Further, this study was limited to participants who had access to the Internet as the surveys were administered online, and because of this, there may have been some self-selection bias.

Significance of the Study

This research provides valuable information concerning the link between training opportunities, POS, JS, and OC of female employees. With the growing need to have a diverse workforce in all areas of employment, it is essential to understand factors that might attract and keep female professionals in a work environment. Female workers in the United States have made many strides in the last few decades regarding employment (Eagly, 2007; Shriver & Center for American Progress, 2009). Women now make up 50% of the workforce in the United States; in almost half of all American families, women are the primary source of income; 40% of the employed women in the United States hold managerial or professional positions, and 70% of families with children have a working mother (Shriver, 2009). Further, women have made gains in the educational sector, enabling them to enter into more areas of employment (Cheung & Halpern, 2010;

DeNavas-Walt et al., 2012; Shriver, 2009). As a group, women now earn 60% of the college degrees awarded each year in the United States, including 50% of the doctoral and professional degrees, 60% of master's degrees, and a little over half of all bachelor's degrees (DeNavas-Walt et al., 2012). When compared to the educational statistics for 1970 where women earned less than 50% of all undergraduate degrees in the United States, less than 40% of all graduate degrees, and less than 10% of doctoral and professional degrees, it is evident that women have made a significant increase in educational success (Shriver & Center for American Progress, 2009). Despite these successes, however, women still remain underpaid and underpromoted when compared to men (National Science Foundation, National Center for Science and Engineering Statistics, 2015; Shriver, 2009).

Research has shown that women still make on average about 77 cents on the dollar compared to their male colleagues regardless of education level (DeNavas-Walt et al., 2012). Further, they are not well represented at all in the upper levels of many large organizations. Only 2% of the Fortune 500 and Fortune 1000 CEOs are women; in the United States, women only hold 8% of the highest managerial jobs (Munoz-Bullon, 2010). Given that women constitute approximately 50% of the middle management positions in the United States, their representation at the higher levels hardly seems proportionate (Shriver, 2009). Researchers have suggested that there could be several causes for this phenomenon including women "opting out" of the workforce due to parenting needs, women lacking proper training and mentoring opportunities, and women not being interested in moving into the highest positions of their organizations (Cheung
& Halpern, 2010; Eagly, 2007; Eagly & Chin, 2010; Sanchez-Hucles & Davis, 2010; Shriver & Center for American Progress, 2009). In this study, I examined whether the lack of access to employer approved career enhancing training opportunities affected the POS, JS, and OC of female faculty members and in turn their organizations' ability to retain them. By understanding the importance of training on the variables in this study, the results can be used to create positive social change by providing more information concerning retaining and hiring women.

Summary and Transition

There is a large body of research that suggests that there is a connection between POS, JS and OC of employees (Meyer et al., 2002; Rhoades & Eisenberger, 2002; Rhoades et al., 2001). Based on OST, the research has shown that POS and JS can and often do influence each other (Chiu & Chen, 2005; Handel, 2005). OC is influenced by both POS and JS (Meyer et al., 2002; Rhoades & Eisenberger, 2002; Rhoades et al., 2001). Based on these findings, it is possible that CETO can affect POS, JS, or OC in a number of ways. The research has not, however, successfully linked all of these variables to CETO provided to employees of an organization by that organization. Further, although there has been significant research done to investigate POS, JS, and OC, there are few studies that specifically investigated women and more specifically the differences that might exist between men and women on these variables.

Chapter 2 is a review of the literature starting with POS that is reviewed in the context of OST and how it might relate to training opportunities followed by a review of the literature on JS and how training opportunities may influence this variable. Next,

research that has been conducted concerning OC and the potential connection to training opportunities provided by an organization to its employees is discussed. This is followed by a discussion of the literature concerning female faculty and their low numbers as tenured faculty members. Finally, the chapter concludes with a summary of all relevant research and a discussion of how it links to the current study's hypotheses.

In Chapter 3, I describe the methodology that was used to study the research questions, including a discussion of the reasons that a multiple regression analysis with a moderator variable was used to analyze the results of the study. The chapter also includes a discussion of the participants used for the research, the ethical considerations of the study, and the procedures of the study.

In Chapter 4, I present the study participant demographic and the regression analysis of the survey data to address each of the respective research questions. Chapter 5 provides a discussion of the results, its limitations, and what they mean for future research.

Chapter 2: Literature Review

Introduction

The purpose of this literature review is to provide a thorough examination of current research on POS, JS, and OC. In doing so, I justified the need for further examination of these concepts as they relate to organizational training opportunities and female employees. The need to examine these concepts as they relate to female employees is important for several reasons: (a) Many organizations wish to recruit, hire, and retain female employees, and research has shown that female employees may respond to an incentive in a manner that is contrary to the way in which a male employee might respond to the same incentive (Carlson & Mellor, 2004; Cheung & Halpern, 2010; Sanchez-Hucles & Davis, 2010), (b) in the United States, equal opportunity laws and antidiscrimination acts require businesses to make a strong attempt to diversify their workforce (Cheung & Halpern, 2010; Sanchez-Hucles & Davis, 2010), (c) having a diverse workforce has increasingly become an advantage in a global business world where an organization's human assets have become a more important way of gaining competitive advantage (Maertz, Griffeth, Campbell, & Allen, 2007), (d) research has shown that POS, JS, and OC have a strong relationship with an employee's intention to leave an organization, which has implications for organizations that wish to retain employees and reduce turnover (Villanueva & Djurkovic, 2009), and (e) recent research has shown that adding women to workgroups can help increase the creativity, productivity, and success of the workgroup (Woolley & Malone, 2011).

Literature Search Strategy

The literature review for this study was conducted using the Walden University library online, the University of West Florida library, the Pensacola State College library, the Pensacola State College library online, and online databases. The search words used in the search for this study included *perceived organizational support, organizational commitment, job satisfaction, women, organizations, affective commitment, continuance commitment, supervisor support, turnover, employee commitment, social exchange theory, psychological contract, organizational support theory, job characteristics model, and absenteeism.* Databases searched included Academic Search Complete, Business Source Complete, PsycArticles, PsycInfo, and SocINDEX. There was no limit to the years that were searched since the information that was being researched could span several different decades and there was uncertainty that the information would be found within a certain time period.

Perceived Organizational Support

First discussed in 1986, POS is a part of OST (Eisenberger, Huntington, Hutchinson, & Sowa, 1986). POS, as defined by organizational support theory, has three major components: an organization meeting the socioemotional needs of its employees, an organization providing the employees with the knowledge that the organization is willing to compensate employees for positive actions that benefit the organization, and an organization ensuring that its employees are secure in their belief that the organization will provide the employees with the support they need (DeConinck & Johnson, 2009; Eisenberger et al., 2001). The word perceived is important to understanding the definition of this concept because it is the perception of each individual employee that may or may not be the same perceptions of other employees who are treated by the organization in the same manner (Edwards, 2009). Since each individual believes that he or she is treated in a particular way by the organization, the individual's behaviors as employees of the organization are a reaction to the value that the employee believes their organization places on their contributions to the organization and the employee's wellbeing (Coyle-Shapiro & Conway, 2005; Edwards, 2009; Edwards & Peccei, 2010).

POS is affected by many different factors, including the employees ranking within an organization, level of job stress, perception of management competence, degree of trust in the organization, amount of pay, availability of bonuses, availability of educational and job enrichment opportunities, the sincerity and frequency of praise from management, and degree of autonomy within the job itself (Watt & Hargis, 2010). Although these are not all of the factors that can affect POS, it is important to note that all of these and other factors may not affect POS in all employees in the same manner. As an example, for some employees, POS might be more strongly associated with frequency of praise from management, while for others POS may be more strongly affected by the amount of autonomy they are granted in the jobs (Ng & Sorenson, 2008).

Individuals may develop POS even before they officially begin working for an organization. Studies have shown that even before an individual goes for an interview, he or she may have already begun to determine the level of support he or she might expect to receive from a company, simply by gathering information from outside sources including friends, family, internet research, and television reports (Casper & Buffardi,

2004). These sources of information are used as a reference point for the individual as he or she attends the interview and begins his or her initial work for a company (Casper & Buffardi, 2004; Rhoades & Eisenberger, 2002). Such information can make an employee feel better by allowing him or her to believe that he or she understands how the company will react to him or her and what type of psychological contract he or she can expect to have with the organization (Lambert, 2011; Levinson, 1965; Thomas, Au, & Ravlin, 2003).

Additional sources of information come from the employee's interactions with his or her managers and also in viewing the treatment received by his or her fellow employees by the organization (Clay-Warner, Reynolds, & Roman, 2005; DeConick & Johnson, 2009). Managers, especially direct supervisors, can be seen as agents of an organization and as such are the living embodiment of the organizations desires (Eisenberger, Karagonlar, Stinglhamber, Neves, Becker, Gonzales-Morales, & Steiger-Mueller, 2010). Therefore, the treatment an employee receives from his or her supervisor and his or her co-workers receive can be perceived by the employee as the way the organization feels about its employees (DeConick & Johnson, 2005; Loi et al., 2006). This can be affected by the degree to which a supervisor embodies the organization (Maertz et al., 2007). Those managers who are seen as having a greater influence in the organization and greater power to make and affect decisions are seen as being more representative of the actual organization (Van Dick et al., 2007). This information is used by employees to determine to what degree the organization cares about them and helps an employee predict an organization's reactions to different actions on the part of the employee (Baranik et al., 2010).

Employees use POS to determine the level or degree of rewards he or she can expect from the organization if he or she increases or improves his or her output, thus POS has value for both the employee and the organization (Armstrong-Stassen & Ursel, 2009; Watt & Hargis, 2010). Individuals who have a high level of POS have been shown to have a lower level of absenteeism from work, are more pleasant in the workplace, are more willing to help coemployees in addition to their own duties, feel less stressed, and are more willing to take on additional tasks during times of crisis for the organization without the need for additional compensation (Allen et al., 2003; Coyle-Shapiro & Conway, 2005; Eder & Eisenberger, 2008). Employees with a high level of POS have been found to suffer from fewer instances of strain as evidenced by fatigue, burnout, headaches, and increased anxiety (Rhoades & Eisenberger, 2002). Additionally, individuals who experience a high level of POS are often more creative, productive overall, more willing to accept organizational change, including technology changes, are less likely to quit or come to work late, and are less likely to violate organizational norms than employees with a low level of POS (Armstrong-Stassen & Ursel, 2009; Villanueva & Djurkovic, 2009).

Perceived Supervisor Support

Another way in which individuals may gather information to determine the extent to which their organization values them and cares about them is through supervisors (Eisenberger et al., 2010; Maertz et al., 2007). This is because in many cases, employees come to view their supervisors as agents of the organization and are therefore representative of the organization's wants, feelings, and needs, also known as SOE (Aselage & Eisenberger, 2003; Villanueva & Djurkovic, 2009). The degree to which an employee perceives his or her supervisor to be a representative of the organization affects the degree to which the employee believes he or she can reasonably assume that promises made and broken by his or her supervisor are promises that are made or broken by the organization (Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002). SOE varies among individual supervisors in an organization. Because of this, the employee attempts to determine to what extent his or her immediate and upper managers embody the ideas and desires of the organization. Those supervisors who are perceived by the employee to be high in SOE are more likely to have their employees view their actions as direct actions of the organization towards them (Eisenberger et al., 2010).

Additionally, employees know that the evaluations they receive from their immediate supervisors will eventually make their way to upper management for review, causing employees to assume that their supervisors and the organization share the same view of the employee (Ng & Sorensen, 2008; Panaccio & Vandenberghe, 2011). From direct supervisors to upper management, research has shown that the actions or nonactions of these leaders can have an effect on the POS of an employee (Aselage & Eisenberger, 2003; Rhoades & Eisenberger, 2002). The interactions between the employee and the supervisor can affect an employee's well-being and POS (Ng & Sorenson, 2008). The development of a general view of how an employee is perceived by his or her supervisor is called perceived supervisor support (PSS; Maertz et al., 2007). PSS is the provision of emotional and instrumental support by supervisors to their employees (Eisenberger et al., 2010). Instrumental support is that which provides the employee with information that is related to his or her job and also feedback relating to his or her work (Eisenberger et al., 2010; Ng & Sorensen, 2008). Emotional support is any form of empathy, caring, and encouragement that increases an employee's attachment to his or her organization (Aselage & Eisenberger, 2003; Ng & Sorensen, 2008).

Increasing PSS may be useful to employers for one very important reason: PSS has been shown to reduce turnover intentions (Maertz et al., 2007). Although there are many other factors that can influence an employee's decision to leave an organization, PSS is one factor that the organization can manage (Aselage & Eisenberger, 2003). PSS is directly related to POS, and therefore increasing PSS can have a positive impact on the POS of an employee (Aselage & Eisenberger, 2003). PSS appears to have an even greater effect on POS when employees believe that their supervisor has high formal or informal influence and status within the organization (Rhoades & Eisenberger, 2002). Also, employees who have a high level of PSS have a weaker relationship between POS and turnover than employees who have low PSS (Maertz et al., 2007). This is because the PSS can in large part make up for a low level of POS, and it can also make employees believe that they have a high level of POS if their supervisor is treating them favorably (Maertz et al., 2007).

Psychological Contract

The psychological contract acts as a basic context to help explain the interaction between the employee and his or her organization over time (Webster & Adams, 2010). It provides insight into the reactions of employees to organizational change and to the breaching of contract terms by organizations (Cassar & Briner, 2011). It is comprised of four major components: inducements promised by the organization to the employee, inducements delivered by the organization to the employee, contributions promised by the employee to the organization, and contributions delivered by the employee to the organization (Lambert, 2011). A key concept that distinguishes psychological contract theory (PCT) from OST is that PCT focuses on the inability or failure of an organization to fulfill their obligations as partners in the psychological contract with an employee (Aselage & Eisenberger, 2003). PCT suggests that it is not the actual treatment itself that the employee receives from the organization that affects his or her POS but rather it is the fulfillment or nonfulfillment of the psychological contract by the organization (Coyle-Shapiro & Conway, 2005). The psychological contract that each employee develops is not necessarily a contract that has been written down or even one that has been verbally discussed between the organization and the employee; instead, the psychological contract is most often a mental product of the employees' expectations of the company and what the employee expects to provide the company in return for its continued compliance with the contract (Lambert, 2011).

Psychological contracts help to provide employees with a sense of security by knowing what they can expect from their organization in multiple situations and contexts

and what they are expected to provide to the organization in return for these behaviors (Cassar & Briner, 2011). This is a process of giving favors to receive favors that, when working properly, can provide employees with a sense of stability and trust, fostering further improved POS and OC (Cassar & Briner, 2011). These contracts are based on what the employee believes are perceived promises by the organization to the employee (Lambert, 2011). The employee develops this perception from information gleaned from the different ways that the organization communicates with the employee (i.e., organizational practices, discussions both formal and informal with employees, and organizational documentation; Aselage & Eisenberger, 2003). Since the psychological contract is not one that is formally established between the employee and the organization from different sources, it is possible that the psychological contract an employee believes he/she has with an organization is not necessarily one to which the organization would necessarily agree (Thomas et al., 2003).

PCT suggests that when an employee feels that the contract between the employee and the organization has been breached, the employee may react in many different ways (Zagenczyk, Gibney, Few, & Scott, 2011). Breach of the contract may suggest to employees that the organization does not value their contributions because if their contributions were valued by the organization, then the contract would not have been breached (Zagenczyk et al., 2011). This thought process could lead the employee to reduce his or her OC and lower his or her POS (Thomas et al., 2003). Lowered POS and OC may reduce organizational citizenship behaviors and increase unwanted behaviors such as absenteeism and turnover (Coyle-Shapiro & Conway, 2005). Understanding the psychological contract is important to POS because it may be able to help explain why an employee reacts in a certain manner or why an organization may not react as expected toward an employee in a given situation.

Social Exchange Theory

Some researchers put social exchange theory forward to help explain how and why POS is developed and maintained by employees (Coyle-Shapiro & Conway, 2005). According to social exchange theory, individuals form partnerships to maximize their own gains with the understanding that they may be required to exchange some of their own goods, services, and time to reach that maximum (Aselage & Eisenberger, 2003; Van Knippenberg et al., 2007). Although initially used to understand the relationship formed between humans and other humans or humans and other living creatures, the theory still applies to employees and the relationship that they develop with their organization.

When applied to organizations and their employees, the social exchange theory suggests that employees form relationships with organizations to maximize their own gain as they would in a relationship with another human (Cropanzano & Mitchell, 2005). This may explain why an individual would choose Corporation A over Corporation B. The employee evaluates what he or she will receive if he or she invests time, energy, and resources into a relationship in an organization (Cropanzano & Mitchell, 2005). The employee must determine if the leisure time he or she gives up, the reduction in social interactions with others outside of the workplace, and any fatigue (physical, mental. or

emotional) he or she experiences is balanced out by the amount of pay and support he or she will receive in the workplace (Eisenberger et al., 2010; Saks, 2006). Additionally, for employees to develop this relationship, they must attempt to explain the behaviors and predict the actions of the organization that they work for (Eisenberger et al., 1986). However, with the exceptions of a computer program, it is difficult, if not impossible, for an employee to predict the reactions of a nonliving entity like an organization. To circumvent this problem, employees essentially make the organization a living person (Eisenberger et al., 2010). This person that the organization represents can be good, bad, or both (Eisenberger et al., 2010). To determine the ways in which the person/organization will act toward him or her, the employee processes information, not only about his or her own treatment but also about the treatment of coemployees and management (Eder & Eisenberger, 2008).

An employee attempts to understand the treatment that he or she has received or that he or she has seen others receive so that he or she can determine the level of effort and energy to put into the relationship with the organization (Allen, Shore, & Griffeth, 2003). If he or she feels that the treatment has been favorable then he or she is more likely to believe that he or she can reasonably assume the organization will continue to react favorably in the future (Hom, Tsui, Wu, Zhang, Fu, & Li, 2009; Lambert, 2011). If, on the other hand, the treatment was negative, then the employee may feel that he or she can expect more of the same treatment in the future and therefore investing more energy or resources into the relationship with the organization than is absolutely necessary would be a fruitless endeavor (Cropanzano & Mitchell, 2005; Lambert, 2011). However, some employees may view the negative treatment as a way to discover alternate types of behavior that will elicit positive responses from the organization (Cropanzo & Mitchell, 2005). The employee may compare the negative treatment that he or she has seen with examples of behavior that received positive treatment from other employees and attempt to model his or her behavior after the behavior that received positive treatment (Cropanzo & Mitchell, 2005). Those employees who have had positive experiences with the organization develop a high level of POS, while those who experience a negative reaction develop a low level of POS (Cropanzo & Mitchell, 2005; Eisenberger et al., 2010; Eisenberger et al., 1987).

Norm of Reciprocity

Research suggests that an employee's actions are based on his or her perceived treatment by the organization also known as the norm of reciprocity (Rhoades & Eisenberger, 2002). An employee's use of the norm of reciprocity in a relationship with an organization is known as employee exchange ideology. Individuals with a strong employee exchange ideology are much more likely to apply the norm of reciprocity to the employee-employer relationship (Allen, Shore, & Griffeth, 2003). An employee develops a strong employee exchange ideology based on the positive interactions witnessed between employees with a high employee exchange ideology and an organization, suggesting that this ideology could benefit the employee (Van Knippenberg, Van Dick, & Tavares, 2007). Assuming that an employee has a high exchange ideology, POS creates a felt obligation that makes the employee care about the welfare and success of the organizations, the greater the level of POS, the greater the level of felt obligation (Eisenberger et al., 1997; Eisenberger et al., 2010). As related to POS the norm of reciprocity deals with an employee's felt obligation to an organization (Eisenberger et al. 2001). POS determines the level of felt obligation (Eisenberger et al., 2001). An employee's felt obligation is an employee's belief concerning how much he or she should care about the health of his or her organization and whether or not he or she should help the organization in its desire to be successful (Eisenberger et al., 2001). When employees experience negative treatment they will be more likely to return unfavorable actions to the organization (Hui, Wong, & Tjosvold, 2007). If, on the other hand, employees perceive that they have been treated positively and are supported by their organization they will be more likely to reciprocate with positive and helpful behaviors that are of value to their organization including taking on additional duties and helping out with organizational problems voluntarily (Mitchell & Ambrose, 2007).

POS can change during the course of time an employee works for an organization (Anderson & Schalk, 1998; Schalk, Campbell, & Freese, 1998). As the employee experiences different treatment from the organization and as he or she watches the treatment of his or her fellow employees by the organization he or she may develop a more negative or positive feeling toward the organization (Anderson & Schalk, 1998; Schalk, Campbell, & Freese, 1998). In some instances, the individuals may also change from having a low level of POS to having a high level of POS (Eder & Eisenberger, 2008). This can occur as a result of the experiences of the employee with the organization, the experiences of co-employees with the organization, or a combination of both (Eder & Eisenberger, 2008; Mitchell & Ambrose, 2007).

Training Opportunities

There are different types of training that organizations require or allow their employees to participate in. The regular training sessions that most organizations require include sexual harassment, ethics, personally identifiable information, and information awareness among others. These types of training opportunities do not increase POS. because employees view them as something an organization is required to provide (often due to federal or state laws) (Allen, Shore, & Griffeth, 2003). This therefore does not show an employee that an organization is providing this training at a great cost to itself to help provide greater opportunities for the employee (Kinnunen, Feldt, & Makikangas, 2008). Conversely, training opportunities that increase an employee's KSA's not only benefit the organization but are also of benefit to the employee and may increase an employee's POS (Allen et al., 2003). This is especially true when the employee can see that the distribution of benefits costs the organization in some manner (i.e. lost employee time at work due to an employee attending classes during working hours or increases in costs as a result of paying for employees' tuition costs) (Kinnunen et al., 2008). Employee satisfaction with career development has been found to positively relate to POS (Watt & Hargis, 2010). POS can be negatively affected by instances of promotional plateauing and job plateauing (Armstrong-Stassen & Ursel, 2009; Tansky & Cohen, 2009). The negative effects on employee POS in such situations can be reduced by increasing developmental training opportunities (Armstrong-Stassen & Ursel, 2009; Tansky & Cohen, 2001).

Job Satisfaction

JS has often been described as an antecedent of OC because an employee satisfaction with his or her job is necessary before an individual can feel committed to an organization (Baranik, Roling, & Eby, 2010). JS can be most simply defined as the employee's evaluation of a job as either positive or negative (Spector, 1985). It is an emotional response of an employee towards the different aspects of the employee's job (Gazioglu & Tansel, 2006)). There are many different aspects of a job that an employee may view as either positive or negative however, for the purposes of this study JS will be studied as a whole concept which encompasses all aspects of the job when taken together. The satisfaction that an employee feels about his or her job may be a result of the number of perceived differences between what the job is actually like and what the employee believes the job should be. JS is an important part of employee retention and organizations that wish to retain their employees should attempt to have their employees maintain a high degree of JS (Villanueva & Djurkovic, 2009).

Job Characteristics Model

Early work concerning JS included the job characteristics model developed by Hackman and Oldham (1975). According to this model, JS can best be understood in a job characteristics model (Hackman & Oldham, 1975; Oldham, Hackman, & Pearce, 1976). They suggested that there were a total of five key job dimensions, skill variety, task identification task significance, autonomy, and feedback, that affected an employee's overall JS and in turn his or her OC and organizational citizenship behaviors (Fried & Ferris, 1987; Gaioglu, & Tansel, 2006; Hackman & Oldham, 1976).

- 1. *Skill Variety* can be described as the degree to which an employee is required to perform a variety of different tasks to carry out his/her job.
- 2. *Task Identification* is the degree to which an employee is evaluated on his or her performance by providing a completed product or piece of work.
- Task Significance is the degree to which an employee's job affects those around him/her that he or she cares about most (i.e. significant others, children, parents, friends).
- 4. *Autonomy* is the degree to which an organization allows the employee to experience freedoms to make decision concerning how he or she will accomplish his or her job, within certain limitations and parameters, as long as he or she is able to complete the work the organization requires of him or her.
- 5. Feedback is the degree to which an employee receives timely, clear, and direct information about how effectively he/she is performing his or her job.

All five of these facets of the employee experience work in tandem to form and continuously influence an employee's JS.

More recent research has confirmed the original theory put forth by Hackman and Oldham indicating that there are several job characteristics that influence an employee's JS (Judge, Bono, & Locke, 2000; Judge & Kammeyer-Mueller, 2012). Additionally, the research has shown that there are several indicators of an employee's JS such as job involvement, job identity, career-development opportunities, OC, stress, POS, pay, job security, job feedback, and job autonomy (Chiu & Chen, 2005; Handel, 2005; Morrison, Cordery, Girardi, & Payne, 2005).

Psychological Contract

The psychological contract has been shown to exert a large amount of influence over several aspects of the employee-organization relationship (Webster & Adams, 2010). Psychological contracts affect POS, OC, and JS (Cassar & Briner, 2011; Coyle-Shapiro & Conway, 2005; Thomas et al., 2003). The psychological contract is based on what the employee believes the organization will provide to the employee assuming the employee fulfills his/her job requirements. It is important to note that it can be developed in part even before the employee begins to work for an organization (Casper & Buffardi, 2004). Given the link between JS and the psychological contract, it is possible that the employee can develop a feeling of JS very early on in interactions with an organization. The psychological contract can be difficult for the organization to manage because the circumstances of the organization may change and necessitate the contract be renegotiated or voided (Rousseau, 2004). These necessities may or may not be understood by the employee and therefore affect the employee's determination of whether or not the organization has violated the psychological contract (Anderson & Schalk, 1998). With regard to JS, the research has shown that an employee feels more satisfied if he or she feels the organization is holding up his or her half of the psychological contract (Schalk, Campbell, & Freese, 1998). Employees seem to be less satisfied and feel that a larger violation of the psychological contract has been breached if the organization has promised large inducements and rewards, and not made good on those promises, than when the organization has only promised a limited number or small inducements (Rousseau, 2001; Rousseau, 2004).

Increasing Job Satisfaction

The literature has shown that JS influences many behaviors exhibited by an employee. These behaviors have both direct and indirect effects on the organization. To increase JS, organizations can take several measures including, increasing training, improving POS, increasing wages and benefits, making sure to appear as fair as possible, and attempting to make employees feel valued (Gazioglu & Tansel, 2006). Given that JS has been repeatedly been found to correlate strongly with behaviors like turnover, absenteeism, and performance, organizations are more likely now to want to understand how they can affect the JS of its employees.

Organizational Commitment

OC has been a popular topic for research for over 4 decades (Brown, 1996; Somers, 2010). Early work on OC found that demographic variables are not the most responsible for the development of OC (Mathieu & Zajac, 1990). Instead, work experiences appear to have a stronger correlation with the development of OC (Mathieu & Zajac, 1990; Obeng, & Ugboro, 2003). These and more recent findings suggest that an organization that wishes to develop employees who are more committed to the organization should not focus as much on finding employees who are predisposed to be committed but instead should attempt to manage the employees' experience as soon as they become a part of the organization to build employee commitment (Chen & Francesco, 2003; Cheng & Stockdale, 2003; Matthew & Zajac, 1990; Meyer et al., 2002).

OC has been defined over the years differently by various researchers as they viewed it in a particular context (Brown, 1996). From viewing commitment as a bond

between the employee and the organization that is consciously maintained, or not, to suggesting that commitment is simply an attitude or feeling towards an individual's organization, the number of ways in which researchers have sought to provide a specific, industry-accepted, concrete definition is substantive (Cooper-Hakim & Viswesvaran, 2005; Meyer & Herscovitch, 2001). OC is similar to an exchange relationship because employees form an attachment to their organization with the expectation that they will receive rewards and employees that are highly committed feel an obligation to help their organization achieve its goals (Panaccio & Vandenberghe, 2011; Villanueva & Djurkovic, 2009). Currently one of the more popular definitions of OC is one that has been made popular by the works of Meyer and Allen (Allen & Meyer, 1990; Allen & Meyer, 1996; Meyer & Allen, 1991; Meyer & Allen, 1993). Based on their research, other researchers have come to view OC as something internal to each employee that determines to what degree an individual feels bound to an organization (Cassar & Briner, 2011; Fedor, Caldwell, & Herold, 2006; Joiner & Bakalis, 2006; Karsh, Bookse, & Sainfort, 2005). Meyer, Allen, and Herscovitch developed and maintain that commitment can be influenced by both internal and external factors, however, the employee is at all times consciously aware of and in control of the level of OC he or she has towards his or her organization (Meyer & Allen, 1991; Allen & Meyer, 1990; Meyer et al., 2002).

Early in the development of theories of commitment, researchers struggled to accurately define and categorize what were obviously different components of OC (Mathieu & Zajac, 1990). Researchers increased their study of OC during the 1990's including the development of a solid OC theory (Meyer et al., 2002). In 1984, Meyer and Allen proposed that there was a difference between affective and CC (Meyer & Allen, 1991). They suggested that AC differed from CC because AC was the emotional attachment, identification, and organizational involvement of an employee while the focus of CC was the negative costs the employee could expect to incur if he or she left his or her current organization (Meyer & Allen, 1991).

In the early 1990's Meyer and Allen developed what has come to be called the three-component model of OC (Allen & Meyer, 1990; Meyer et al., 2002). In this view, OC is a combination of affective, normative, and CC to varying degrees (Meyer et al., 2002; Meyer, Becker, & Vandenberghe, 2004). AC is best described as an employee's desire to remain with and committed to an organization (Allen & Meyer, 1990; Meyer & Allen, 1991; Meyer & Allen, 1996). AC, it should be noted, is an emotional bond that an employee develops with his or her organization (Meyer & Allen, 1993; Meyer & Herscovitch, 2001). NC on the other hand is the degree of OC an employee feels he or she must hold towards his or her organization, it can be described as an employee's loyalty that is based on his or her need to fulfill a perceived obligation (Meyer & Allen, 1996; Meyer et al., 2002). Finally, CC is an attachment that an employee has to his or her organization that is determined by the cost that an employee perceives he or she will incur as a result of leaving his or her organization (Meyer et al., 2002). It is important to note that while all three measures of OC relate to turnover negatively, they are related to other measures of work-relevant behaviors (e.g. attendance, organizational citizenship behaviors, etc.) differently (Allen & Meyer, 1990; Allen & Meyer, 1996).

Affective Commitment

Affective Commitment (AC) is the bond that forms between an organization and its employee. Often this can be thought of as employee loyalty to the organization (Griffin, Hogan, Lambert, Tucker-Gail, & Baker, 2010). Much of the research conducted concerning AC has shown that it is strongly correlated with overall JS, absenteeism, job performance and organizational citizenship behaviors (Johnson & Chang, 2006; Meyer & Allen, 1991; Meyer, Becker, & Vandenberghe, 2004; Meyer et al.; 2002; Shore & Wayne, 1993). One of the factors that can decrease an employees' AC is a perceived violation of the psychological contract (Loi et al. 2006). AC was negatively correlated with absenteeism and further research has shown a stronger correlation with voluntary than involuntary absenteeism (Meyer et al., 2002). With respect to overall JS, many studies have shown such a strong correlation between the two that speculation concerning whether or not they are truly distinct has taken place for decades (Meyer & Allen, 1993; Meyer & Herscovitch, 2001; Meyer et al., 2002). However, the results from a recent meta-analysis suggest that while closely related, the JS and AC are two distinct concepts (Meyer et al., 2002). The authors of the meta-analysis suggest that a potential reason for the strong correlation between the two variables is that global measures of JS usually include questions that relate to satisfaction with the organization itself and/or the organization's management (Meyer, Stanley, Herscovotch, & Topolyntsky, 2002. Therefore, it is suggested that the concepts be studied independently when attempting to explain or manage any employee behavior (Meyer, Stanley, Herscovotch, &

Topolyntsky, 2002). Additionally, the research has found that POS was positively correlated specifically to employee AC (Aselage & Eisenberger, 2003).

Normative Organizational Commitment

Normative OC has been described as a moral imperative relationship that is maintained because the relationship allows the employee to express his or her deeply held values and/or morals (Meyer, Becker, & Van Dick, 2006; Wiener, 1982). Research has shown that the higher the degree to which an employee's values agree that with those of the organization the more likely that employee is to stay with an organization (Meyer et al., 2002). Those employees whose values are in line with those of the organization are more likely to be satisfied with the organization and have higher levels of OC and POS (Cable & DeRue, 2002; Watrous et al., 2006).

Affective and Normative Commitment Relationship

Several studies have found that both AC and NC are highly correlated (Allen & Meyer, 1990; Ko, Price, & Mueller, 1997; Meyer, Allen, & Smith, 1993; Meyer et al., 2002). This has led to the re-examination of these two concepts in support of their distinctiveness from each other (Allen & Meyer, 1996). In a meta-analysis conducted by Meyer, Stanley, Herscovitch, and Topolnytsky (2002), a strong correlation was found between affective and NC, however, the strength of this correlation was reduced if the study analyzed used the 6-item NCS rather than the 8-item NCS. The authors suggested that this might be due in part to the specific goals of the 8-item vice the 6-item NCS (Meyer et al., 2002). The 8-item NCS was developed first and was based on Weiner's (1982) concept of NC that placed a greater emphasis on the degree to which the

employee internalized the social values of the organization (Allen & Meyer, 1990). The 6-item NCS was developed later, and focuses specifically on the employee's sense of obligation to remain with the organization with no regard to the origination of the obligation toward the organization (Meyer, et. al., 1993; Meyer et. al, 2002).

Continuance Organizational Commitment

Research has found that CC is negatively correlated with an employee's perception of the ability of his or her skills, knowledge, and education to transfer easily to another organization (Meyer et al., 2002). Training and development is also negatively associated with continuance employee commitment (Shore et al., 2008). Therefore, an employee who believed he or she had specific skills applicable to only his or her organization or a very limited number of organizations would have a higher level of CC (Meyer et al., 2002). CC generally reflects two features of an employee's current circumstances: the personal sacrifice that an employee will have to make if he or she leaves his or her organization and the lack of available alternative organizations to go to (Cassar & Briner, 2011). Continuous commitment is more likely to increase when an employee feels that the psychological contract he or she has with his or her organization has been violated (Cassar & Briner, 2011).

Organizational Commitment and Perceived Organizational Support

POS is an antecedent of OC, and the relationship seems strongest in relation to normative and AC (Mankanjee, et al, 2006). The higher an employee's level of POS, the more committed he or she is to his or her organizational, reducing the degree of employee turnover for the organization (Loi et al., 2006). Multiple aspects of POS are associated with OC especially the psychological contract and social exchange theories (Loi et al., 2006). Research has shown that the higher an employee's degree of POS, the lower the employees degree of CC, indicating that the more an employee feels supported the less likely he or she will feel like he or she has to stay with an organization even when he or she wishes to leave (Shore & Tetrick, 1991). Employers who wish to reduce the possible turnover of their employees should work to ensure that their employees have a higher degree of POS, thereby increasing employee OC (Mankanjee et al., 2006).

Organizational Commitment and Job Satisfaction

Employers continue to wonder about the relationship between OC and JS because committed employees are so valuable to organizations, and due to the changes in the employee-employer relationship in the past few decades, employers must be more vigilant about making sure their employees are committed if they wish to lower or keep low their turnover rates (Hu et al., 1998; Van Dick et al., 2006). The research has shown that there is a clear and consistent link between OC and JS for employees (Porter, Steers, Mowday, Boulian, 1974). Previous research has investigated whether or not OC and JS were truly distinct categories and measured two different aspects of the employee experience (Parnell & Crandall, 2003). The research has shown that while OC and JS might be related, that are in fact distinct enough to be measured and evaluated on their own and that JS is a major predictor of OC (Parnell & Crandall, 2003; Porter et al., 1974; Yoon & Thye, 2002).

Female Faculty and Tenure

United States female faculty members have faced challenges attaining tenure throughout the history of academia (Harper et al., 2001). This issue still seems to be prominent today with only a few postsecondary institutions having as many tenured female faculty as male (August & Waltman, 2004; Callister, 2006). More often, female faculty members are likely to be part-time or adjunct professors and not on a tenure track with their institution (August & Waltman, 2004; Harper, et. al, 2001; National Science Foundation, National Center for Science and Engineering Statistics, 2015). Research has shown that women face a host of issues as they try to become tenured including access to resources and informal networks, a double standard with regard to evaluations, and a system of attaining tenure that is not formally defined and therefore extremely subjective (Harper, et. al, 2001; Winkler, 2000). Finally, many faculty members, both male and female faculty members are reluctant to openly discuss the topic due to the tensions it causes (Winkler, 2000).

When discussing the subject of female faculty one must of course speak to the concept of double standards. Evaluations by students are very important for faculty members and many female professors have suggested they feel as if they face an unfair standard (Bachen, McLoughlin, & Garcia, 1999). On one hand female faculty are supposed to appear caring and feminine, however this may very well lead some students, especially male students to rate those professors as less scholarly and therefore their lectures are subject to more question than male faculty members (Bachen, et. al, 1999). On the other hand, female faculty who do not appear warm and welcoming to students

are often listed as callous, uncaring, and unapproachable to their students (Callister, 2006; Winkler, 2000). This places female faculty members in a predicament; they have to somehow find a magic line to walk across to be able to remain in between these two viewpoints.

Female faculty members have reported a lack of available resources and support from their institutions and departments. Specifically, they cite a lack of access to graduate students, financial assistance, start-up equipment and access to informal and formal mentoring networks (August & Waltman, 2004). Women in postsecondary education, often report that they are not privy to the informal networks that some of their male colleagues are (August & Waltman, 2004; Harper, et. al, 2001; Winkler, 2000). Female faculty members are not as numerous in many departments as male faculty; therefore they are not able to create informal networks with other female faculty members because they are too few in number (Winkler, 2000). Additionally, female faculty members may be concerned that if they develop or participate in an all-female informal network that they may be viewed as feminists, a label which often has a negative connotation in association with career progress (Winkler, 2000).

The process of attaining tenure is different for every postsecondary institution (Winkler, 2000). There is usually no formal policy explicitly outlining what an individual has to do to be able to attain tenure or even be placed on the tenure track as a professor (Winkler, 2000). Female faculty members are often unsure of the requirements necessary to be able to become tenured (Winkler, 2000). There is no set number of publications, specific journals to be published in, set amount of grant money received, or specific number of positive evaluations to receive from colleagues, department heads, and students that will guarantee an individual will be granted tenure (Winkler, 2000). Women are more likely to focus on publishing a few articles, but the articles that they do publish are of higher quality than their male counterparts (Perna, 2001; Winkler, 2000). Research shows that women publish fewer articles but the articles they do publish are cited at almost twice the rate of the articles published by their male peers (Winkler, 2000). It is currently unclear whether or not faculty members are most likely to be granted tenure based on the quality of their work or the volume of the work that they publish.

Finally, differences in salary continue to be an issue between male and female faculty members (National Science Foundation, National Center for Science and Engineering Statistics, 2015; Robst, VanGlilder, & Polachek, 2003). Female faculty members continue to be paid less when compared to male faculty members with similar skills and this appears to have some effect on the JS of female faculty members (August & Waltman, 2004). Robst et al. (2003) found that when female faculty members perceived their salaries were lower than their male counterparts, they reported a higher degree of unfairness in their workplace and also lower JS. To increase the number of female faculty members hired and retained by a postsecondary institution, colleges and universities should look to their current departmental policies and see if the climate they have is conducive to female faculty perceived a high degree of fairness and equity between themselves and male faculty members (Robst et al. 2003).

Summary and Transition

This chapter presented a review of the literature related POS, JS, OC, and the concern about the lack of tenured female faculty. POS affects both JS and OC in that if an employee feels that he or she is not supported by his or her organization he or she will feel less satisfied with his or her job and also less committed to his or her organization (Mankanjee et al., 2006; Morrison et al., 2005; Porter et al. 1974). JS is influenced by POS but also influences OC; an employee who is not satisfied with the work they are performing for an organization will be much less likely to be committed to that organization (Parnell & Crandall, 2003). The research has shown that POS, JS, and OC are linked together and can affect organizational citizenship behaviors like absenteeism (Yoon & Thye, 2002; Wheeler, Gallagher, Brower, & Sablynski, 2007). Further POS, JS, and OC can affect an employee's decision to leave or stay with an organization, which can affect an organization financially due to the high cost of hiring a new individual and training the new hire (Loi et al., 2006; Mankanjee et al., 2006).

Research has also shown that there still remains a large gap in the number of tenured female faculty members relative to the number of females who receive doctoral degrees in many disciplines (National Science Foundation, National Center for Science and Engineering Statistics, 2015; Zhang, 2008). Female faculty report facing a variety of hindrances to attaining tenure including a system that is not clearly defined, little or no access to formal networks, a desire to publish work that is a higher quality of work vice a higher number of articles (which appears to be the opposite of male faculty members), and the double standard when being evaluated by students as either being less scholarly

and knowledgeable than male faculty members and therefore subject to more scrutiny and questioning or that they are too manly and unapproachable (Bachen, et. al, 1999; Callister, 2006; Robst, et. al, 2003; Winkler, 2000).

As postsecondary institutions seek to increase the number of female students, they should look to hire and/or retain more female faculty (Callister, 2006). Studies show that female graduate students spend less time in graduate school if they have a female advisor (Winkler, 2000). Further, female students report that they feel they have better quality interactions with female faculty members than male faculty members (Newmark & Gardecki, 1998). Increasing the number of female faculty, and tenured female faculty could have an impact on a postsecondary institutions ability to attract female students at both the undergraduate and graduate level (Ashworth & Evans, 2001; Callister, 2006). Recent research indicates that individuals at the postsecondary level are more likely to be involved in subjects where they see someone who "looks like them" teaching the class or heading the department (Rask & Bailey, 2002).

Chapter 3 discusses the methodology used to examine the hypotheses in this study. From a population of faculty who teach at four-year postsecondary institutions, a sample of men and women were surveyed to determine their level of POS, JS, and OC. The results of this survey were compared to demographic information that was also be collected from the participants at the same time including information about gender and current faculty status (adjunct, part-time, associate, and tenured). A correlational analysis was first conducted to look significant relationships between the variables. Next, multiple regression analyses were conducted to determine what, if any link, there was between CETO and POS, OC, and JS and using gender as a moderator variable to see if gender has a significant effect on the relationship between POS, JS, and OC and CETO.

Chapter 4 presents the study participant demographic and the regression analysis of the survey data to address each of the respective research questions. Chapter 5 provides a discussion of the results, its limitations, and what they mean for future research.

Chapter 3: Research Method

Introduction

In this chapter, I discuss the design, sample, instrumentation, and data analysis of the current study. An overview of the study is provided to explain the rationale for using this particular research design. A description of the population and sample size is presented as well as reliability and validity information concerning the instrumentation that was used. The chapter concludes with a discussion of the data collection and analysis processes.

Research Design and Approach

This was a nonexperimental quantitative study that investigated the relationship between the predictor variable, CETO, at a 4-year postsecondary institution, and three outcome variables: POS, JS, and OC using a cross-sectional survey. Further, in the study, I assessed the extent to which, if any, the variable gender moderated the relationship between the predictor variable and the outcome variables. The predictor variable and the moderator variable were measured using a cross-sectional survey that was designed to assess the participant's perception of CETO. The SPOS was used to measure the outcome variable POS, the JSS was used to measure the outcome variable JS, and the TCMECS was used to measure OC. A regression analysis was performed for each of the three variables, POS, JS, and OC, to determine their relationship, if any, to CETO. Further, a moderation analysis was conducted using gender as the moderating variable on the relationships between each of the outcome variables and CETO.

Target Population and Sample

The participants consisted of both male and female faculty members currently teaching at a 4-year institution of higher learning (either a college or a university). Demographic variables also considered included participant age, gender, race, education, experience, tenure, and salary. Participants were recruited from the Walden Participant Pool and different discussion groups on the LinkedIn website. The survey was left open for a total of 30 days for participant in both locations. The individuals were directed to click on a link that was found on the bottom of the consent form that took them directly to the Survey Monkey website, which was where the survey was hosted. Only those who were (a) over the age of 18 and legally able to provide informed consent, (b) currently teaching at a 4-year institution of higher learning, (c) responded to the survey in a clear manner, (d) provided their gender, and (e) completed the POS, JS, and OC surveys were included in the study.

Instrumentation

Each participant in the study completed a series of instruments designed to capture the predictor and moderator variables in the study and additional demographic information. The instruments administered were a Demographic Questionnaire, the SPOS, the JSS, and the TCMECS.

Demographic Questionnaire

A demographic questionnaire was given to the participants to collect their basic information regarding their current age, gender, race, tenure, highest level of education achieved, current institution, total number of years of teaching experience at the postsecondary level, length of time teaching at their current institution, what field they received their highest degree in, length of time since highest degree attained, in what department they were currently teaching, how many CETO they had been offered in the past 1 year, and what their approximate annual salary was from teaching. Participants were asked to provide their age for the survey and were able to select from male, female, and other regarding their gender. This survey documented race using the following six levels: African-American, Caucasian, Hispanic, Native American, and other, with a blank to list their race. The demographic variable tenure had two levels, tenure and nontenure, from which the participants could choose. The participants' faculty rank was documented by asking the participants to choose from seven different levels (full professor, associate professor, assistant professor, instructor, lecturer, adjunct, and other). The study participants' total years of teaching experience at the postsecondary level and length of time at their current institution were both measured in years using ranges of 0 to 2, 3 to 5, 6 to 8, and over 8 years. Participants were asked to provide a number for the approximate number of CETO that their institution had offered them in the past year (365 days) and for their approximate annual salary at the institution. The demographic instrument was used to gather background on the participants to compare groups of professors to each other and was only used as descriptive information. A copy of the demographic survey can be found in Appendix A.

Survey of Perceived Organizational Support

The SPOS was developed to measure an employee's beliefs concerning the support their organization provides him or her (Eisenberger et al., 1986). The long

version of the survey consists of 36 statements that represent the various ways that employees can judge the discretionary actions of the organization and also the ways that the employee evaluates the organization in general (Eisenberger et al., 1986). Items on the SPOS are scored on a 7 point-Likert type scale, where 1 indicates the employee *strongly disagrees* with the statement and 7 indicates the employee *strongly agrees* with the statement (Eisenberger et al., 1986). To control for any agreement response bias, half of the statements are worded positively and the other half of the statements are worded negatively (Eisenberger et al., 1986). The statements fall into two categories: those that refer to evaluative judgments the employee believes the organization attributes to him or her and statements that reflect actions that the employee believes the organization would take on his or her behalf (Eisenberger et al., 1986).

Reliability and validity. The 36-item version of the SPOS had a reliability coefficient (Cronbach's alpha) of 0.97 and item-total correlations between 0.42 and 0.83, a mean item-total correlation of 0.67, and a median item-total correlation of 0.66 (Eisenberger et al., 1986). In this study, I used the shorter version of the SPOS that consisted of eight items. The shorter version of the study was developed by choosing the eight statements that were most highly correlated with the main factor and appeared to be applicable to a number of different organizations (Eisenberger et al., 1997). The 8-item version of the SPOS had a reliability coefficient (Cronbach's alpha) of 0.90 (Eisenberger et al., 1997). Other research has confirmed the high reliability of the items on the short version of the SPOS with reliabilities for the items with coefficient alphas ranging from 0.87 to 0.93 (Shanock & Eisenberger, 2006). Permission to use the SPOS can be found
in Appendix C and a copy of the 8-item SPOS can be found in Appendix D. The SPOS has been correlated, highly with both the organizational commitment questionnaire and the AC scale (r = 0.71 and 0.70 respectively).

Job Satisfaction Survey

The JSS is a 36-item survey that is designed to measure an employee's JS on a continuum from low levels (dissatisfied) to high levels (satisfied; Spector, 1985). It was designed to be applicable to employment areas that provide human service, both within the public sector and the nonprofit sector (Spector, 1987). Spector's JSS items are scored in a 6-point Likert-type scale with 1 representing the strongest level of disagreement and 6 representing the strongest level of agreement with the statement. The JSS measures nine facets of employee job satisfaction (Spector, 1985). There are four questions related to each of the nine facets that are measured; pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, coworkers, nature of work, and communication. Both negatively-worded and positively worded statements are listed on the survey. Possible scores for each question range from 4 to 24 points (Spector, 1985).

Reliability and validity. The nine facets of the JSS had internal consistency reliability levels between 0.60 and 0.71 (Cronbach's alpha), with only two of the subscales having an internal reliability below 0.70, and the total scale had an internal reliability of 0.91 (Spector, 1985). The test-retest reliability for the nine subscales ranged between 0.37 and 0.74 with the total survey having a test-retest reliability of 0.71 (Spector, 1985). Validity for the JSS was found by a multimethod analysis of the JSS and the job descriptive index. Each subscale for the respective surveys was larger than 0 and

in fact ranged from 0.61 to 0.80. All facets of the JSS have also been correlated with the organizational commitment questionnaire (Spector, 1985). Permission to use the JSS can be found in Appendix E, and a copy of the JSS can be found in Appendix F.

Three Component Model of Employee Commitment Survey

The TCMECS was developed to measure affective OC, normative OC, and continuance OC (Allen & Meyer, 1990). For each of these areas, eight items were developed to assess the level of commitment each employee had to the organization (Allen & Meyer, 1990). Participants respond to the questions using a 7-point Likert-type scale ranging from 1 (*strongly agree*) to 7 (*strongly disagree*). Additionally, while all three of these surveys are designed to measure a different facet of employee OC, each one has been correlated with negative employee behaviors such as withdrawal, turnover, and absenteeism (Meyer et al., 2002). For the purposes of this study, the response scale was adjusted for the TCMECS so that for all of the surveys, the lowest number means *strongly disagree* and the highest number means *strongly agree*. This is to reduce confusion of the participants when two of the scales have the lowest number as *strongly disagree* and the highest as *strongly agree*, and the third survey uses the lowest number to represent strongly agreeing and the highest number strongly disagreeing.

Reliability and validity. When validated in other studies, the Affective Commitment Scale (ACS) had a reliability of 0.87, the Normative Commitment Scale (NCS) had a reliability of 0.75, and the Continuance Commitment Scale (CCS) had a reliability of 0.79 (Allen & Meyer, 1990). Later research found the ACS to have a coefficient alpha of 0.86, the NCS to have a coefficient alpha of 0.78, and the CCS to have a coefficient of 0.84 (Weng et al., 2010). It is important to note that regarding the CCS and NCS, little work has been done to correlate them individually with previously developed scales; the ACS is the only scale that has been extensively correlated with other scales. The ACS was correlated with the Organizational Commitment Questionnaire, and on average the correlation between the two scales was above 0.80 (Meyer & Allen, 1991).

Research Questions and Hypotheses

The purpose of this study was to examine the relationship between the predictor variable, CETO, and the outcome variables POS, JS, and OC. In this study, I also explored the interaction between the variables using the moderator variable gender to determine if it impacted the relationship between POS, JS, and OC for faculty members given their CETO. No previous research has addressed the effect that gender can have on the relationship between CETO and POS, JS, and OC. To explore these relationships and interactions, the following research questions were addressed:

Research Question 1: Is there a relationship between postsecondary faculty CETO and POS?

 H_01 : There is no relationship between the number of CETO offered to postsecondary faculty and POS as assessed by the SPOS.

 H_a1 : There is a relationship between the number of CETO offered to postsecondary faculty and POS as assessed by the SPOS.

Research Question 2: Is there a relationship between postsecondary faculty CETO and JS?

 H_02 : There is no relationship between the number of CETO offered to postsecondary faculty and JS as assessed by the JSS.

 H_a2 : There is a relationship between the number of CETO that are offered to postsecondary faculty and JS as assessed by the JSS.

Research Question 3: Is there a relationship between postsecondary faculty CETO and OC?

 H_03 : There is no relationship between the number of CETO that are offered to postsecondary faculty and OC as assessed by the TCMECS.

 H_a 3: There is a relationship between the number of CETO that are offered to postsecondary faculty and OC as assessed by the TCMECS.

Research Question 4: Does gender moderate the relationship between

postsecondary faculty CETO and POS?

 H_04 : Gender does not moderate the relationship between the number of CETO

offered to postsecondary faculty and POS.

 H_a 4: Gender moderates the relationship between the number of CETO offered to postsecondary faculty and POS.

Research Question 5. Does gender moderate the relationship between postsecondary faculty CETO and JS?

 H_05 : Gender does not moderate the relationship between the number of CETO offered to postsecondary faculty and JS.

 H_a5 : Gender moderates the relationship between the number of CETO offered to postsecondary faculty and JS.

Research Question 6. Does gender moderate the relationship between postsecondary faculty CETO and OC?

 H_06 : Gender does not moderate the relationship between the number of CETO offered to postsecondary faculty and OC.

 $H_{a}6$: Gender moderates the relationship between the number of CETO offered to postsecondary faculty and OC.

Data Collection

This was a nonexperimental research study in which I sought to provide a correlation between several variables. The surveys for this study were completed via Survey Monkey, which is a secure website specializing in survey software that helps researchers distribute questionnaires, collect data in real time, analyze survey responses, and allows researchers to export the data into other statistical analysis software programs. Each of the participants viewed an introductory letter that served as the informed consent form for the study. After reviewing the introductory letter, they were asked to proceed and complete the survey. A copy of the introduction letter to the study participants can be found in Appendix A. No psychological, social, physical, mental, or emotional harm was expected to come to the participants as a result of their participation in this study. I abided by all ethical guidelines concerning research using human subjects and no identifying information was reported or disclosed.

I provided an electronic link to each individual who chose to participate in the study via an introductory letter, which also served as the informed consent form for the participant. Participants were recruited from the Walden Participant Pool and also from discussion boards on the LinkedIn website. The participants visited the survey website via the survey link and responded to the survey questions. The survey was accessible to the participants for 30 days. At midnight on Day 30, the survey was closed, and no more participants were allowed to complete the survey. After the survey was closed, the data were reviewed in Survey Monkey and then moved into the Statistical Package for Social Sciences (SPSS) for further analysis. All data were collected using Survey Monkeys secure server and later imported into SPSS. All personally identifiable information was concealed prior to exporting the data and no names or identifying information were released or reported.

Statistical Analysis

This study utilized SPSS version 21 to analyze the data. Responses to the JSS, POS, and TCMECS were scored in accordance with the guidance provided for each of the surveys. Steps were taken to ensure the analyses did not violate any assumptions of normality and linearity. For each of the scales a composite score was calculated to address the six research questions that were investigated in this study. It should be noted that for the TCMECS there was a composite score for each of the three subscales.

The Shapiro-Wilk's test was used to determine if the data were normally distributed and scores greater than 0.05 were considered to meet the assumption of normality. Tolerances were also tested to avoid any collinearity. A histogram and p-pot were created for each linear regression to check for normal distribution and the assumption that the relationship between each predictor variable and outcome variable was linear was tested by creating a scatterplot using the partial regression plot function of SPSS. An exploratory analysis was conducted to check for outliers and missing data. Outliers by influence were checked using Cook's and Leverage values (which appear on the Linear Regression Save menu in SPSS). A review of the Cook's distance and Centered Leverage Value allowed a determination to be made regarding whether or not a participant was an outlier by influence. Outliers by distance were checked using the boxplot method. Multicollinearity was checked using the collinearity diagnostics option on the linear regression statistics screen in SPSS. Tolerance values were checked to make sure they were above 0.2 (any values below 0.2 indicate multicollinearity) and the Variance Inflation Factor (VIF) column was checked to make sure the value was not above 5 (indicating a high degree of multicollinearity). The results of these checks to ensure the assumptions were met are presented in Chapter 4.

A correlation was conducted first to check for significant relationships between the variables followed by a moderation analysis of the variables to see what effect, if any, gender had on the relationship between the predictor (CETO) and outcome (POS, JS, and OC) variables. To answer Research Questions 1 and 4, a hierarchical linear multiple regression moderation analysis was conducted. The first step in the moderation analysis examined the relationship between CETO and POS. POS was entered as the dependent (outcome) variable and CETO was entered into block 1 as the independent (predictor) variable. The second step was entering the variable GENDER as an independent variable into block 1 as an independent variable. Although the variable gender was not examined as part of the study, it was entered as a necessary step for conducting the moderation analysis. Hypothesis 4 was tested by the third step of the moderation analysis when gender and the interaction variable (CETO x Gender) were also entered into the regression equation. To answer Research Questions 2 and 5 a hierarchical linear regression moderation analysis was also conducted. The first step in the moderation analysis examined the relationship between CETO and JS. JS was entered as the dependent (outcome) variable and CETO was entered into block 1 as the independent (predictor) variable. The second step was entering the variable GENDER as an independent variable into block 1 as an independent variable. Although the variable gender was not examined as part of the study, it was entered as a necessary step for conducting the moderation analysis. Hypothesis 5 was tested by the third step of the moderation analysis when gender and the interaction variable (CETO x Gender) were also entered into the regression equation. Finally, Research Questions 3 and 6 were tested with a hierarchical linear regression moderation analysis. The first step in the hierarchical linear regression moderation analysis examined the relationship between CETO and OC. Unlike the other outcome variables OC is composed of three distinct components, AC, CC, and NC. To ensure that each component received its own analysis, the specific components of OC were examined individually. AC, CC, or NC were entered as the dependent (outcome) variable and CETO was entered into block 1 as the independent (predictor) variable. The analysis was then run again for the remaining OC component(s) that had not previously been tested. The second step was entering the variable GENDER as an independent variable into block 1 as an independent variable. Although the variable gender was not examined as part of the study, it was entered as a necessary step for conducting the moderation analysis. Hypothesis 6 was tested by the

third step of the moderation analysis when gender and the interaction variable (CETO_x_Gender) were also entered into the regression equation. For each of these steps the outcome variable AC, CC, or NC were entered and the remaining commitment component variables entered in a separate analysis.

A hierarchical linear regression moderation analysis was conducted regardless of whether or not the relationship between the predictor and outcome variables was significant. Although it was unlikely, it was possible that a significant relationship may not have been found between the predictor and outcome variables but the moderating variable, gender, may still have had a significant effect on their relationship. Because it is categorical, the variable gender was dummy coded with 0 representing female participants and 1 representing male participants. The interaction term for each hierarchical linear regression moderation analysis was created by a computation between the predictor variable (CETO) and the moderating variable gender (CETO_x_Gender).

For the analyses conducted for each research question, a Bonferroni correction was made. For the hierarchical linear regression moderation analyses the alpha level was divided by three. The correction was a family-wise correction and because AC, NC, and CC are all part of the same construct they were counted as one test. Because multiple tests were conducted during the data analysis process, a Bonferroni correction was used to reduce the likelihood of obtaining a significant result by chance (TYPE I error).

Surveys that were missing data were still used in the data analysis as long as the participant answered the question about their gender and the number of CETO they have been offered. If participants did not answer the other questions on the demographic

survey, their data was still used and the missing information noted as necessary in the discussion of the analysis results. For the SPOS, JSS, and TCMECS participant responses to the questions were analyzed regardless of whether all questions were answered or not. To compensate for any missing values in the participants survey, the missing data for each scale and the three subscales of TCMECS were replaced with the group means. Replacing data with the group mean is one of many methods of dealing with missing data. The reason this was chosen as the method for dealing with the data for this survey is because of the small sample size of the participants and a need to be practical with the number of responses to analyze data. Deleting the data from any participant who did not complete all of the survey or the complete battery of surveys may have resulted in a sample size below what Cohen (1992) suggested was the minimum number of responses needed to detect a medium effect size (n = 76) using correlational and regression analyses with 3 independent variables. Researchers in previous literature have used this method of dealing with data especially with smaller sample sizes as a way to take a practical approach to data analysis (Graham, 2009). Additionally, using this method was chosen over a regression equation to replace the missing values to reduce the chance of a Type I error. The drawback to using an imputed mean is that there is a higher chance of a Type II error, however, in the case of this research it was preferable to not find a relationship that might exist rather than risk reporting a relationship that does not exist.

Protection of Human Participants

The participants for this study came from four-year postsecondary institutions throughout the world. Permission to begin collecting data was granted by the Walden University IRB and the approval number for this study is 07-16-14-0098096. The researcher provided the participants with an introductory letter asking them to participate in the study. The introductory letter served to inform the participants of the purpose of the study, the overall goal of the study, and how the researcher could be contacted for further information. Additionally, participants were informed via the introduction letter that they could exit the survey at any time and did not have to complete the survey if at any time they feel uncomfortable or unwilling to continue.

The participants in this study were not expected to suffer any emotional, physical, or mental stress as a result of participating in the study. The demographic data that were collected about the faculty members were not linked to any personally identifiable information (PII). No email addresses were stored with the data; preventing the researcher from knowing what email address is associated with what responses. All information was collected from the participants using a secure survey website (via Survey Monkey) and was stored on the researcher's computer which is password protected. The data were analyzed on the researcher's computer using SPSS. Any findings shared publicly do not include any PII.

Dissemination of Findings

All participants who requested a copy of the study that provided an email address will be sent a PDF copy. Additionally, a PDF copy will be provided to Dr. Paul Spector and Dr. Robert Eisenberger as requested for the use of their JSS and SPOS.

Summary and Transition

This chapter presented a description of the data collection process, methodology for the research, the procedures that were taken to protect the rights of the participants in the study, and the ways in which findings were disseminated. The sample population was both male and female faculty members of universities and colleges in the United States. A posted introduction letter to the participants served as an informed consent form and contained a link to the survey should the faculty members wish to participate. Data from the participants were collected using a secure website (Survey Monkey). The series of surveys that the participants took was composed of 4 instruments: a Demographic Questionnaire, the SPOS, the JSS, and the TCM of OS. No information that might identify the participants was stored with the responses, allowing the data to be analyzed by the researcher with no knowledge of who participated in the study. Correlational and multiple regression analyses using SPSS were conducted to interpret the data collected from the surveys. The data were shared with the participants if they requested a copy of the survey results from the researcher.

Chapter 4 presents the results of the study and the analyses used to determine the significance of the results. Chapter 5 is a discussion of the results of the study, the limitations of the study, and the studies implications for social change.

Chapter 4: Results

Introduction

The purpose of this study was to determine what effect, if any, the availability of CETO available for postsecondary instructors affected their level of POS, JS, and OC. Further, I examined whether or not gender moderated the relationship between CETO and POS, JS, and OC. To achieve that goal, a survey was administered to individuals of multiple 4-year postsecondary institutions, and the results were analyzed. The correlation analysis did not show a statistically significant relationship between the predictor variable, CETO, and any of the outcome variables POS, JS, and OC (which was composed of AC, CC, and NC). An effect size was noted between CETO and POS, JS, and AC, CC, and NC, therefore to expound upon the effect size found and for exploratory purposes a moderation analysis was conducted even though there results of the correlation analyses were not statistically significant. Further, the moderation analyses did not show that gender had any statistically significant effect on the relationship between CETO and the outcome variables POS, JS, and OC.

Participant Demographics

A total of 123 individuals participated in the study, however 10 were removed because there were technical problems with the survey and they were unable to answer the questions to the SPOS, JSS, and TCMECS, as they wanted to. An additional six individuals were removed from the study since they did not answer any of the questions from the portion of the survey that measured POS, JS, or OC, bringing the number of participants to 107. The responses of the individuals who provided their gender and also answered at least one of the other surveys (POS, JS, or OC) were kept for data analysis. Any of the responses that they were missing were replaced with the group means for that particular survey. An additional 17 individuals were removed because they were outliers from the rest of the group and to ensure the ability to run statistical tests the responses from these participants needed to be removed from the sample data that was analyzed. This left a total of 90 individuals with which to analyze data. The demographic breakout, including frequencies and percentages for the final 90 participants are listed below (see Tables 1 & 2). Of the 90 participants, 56 (62%) were female and 34 (38%) were male (see Table 1). The ages of the participants were categorized in ranges with the largest number of participants, 28 (31%) between the ages of 45 to 54 and the second largest group, 22 participants (24%), were between the ages of 35 to 44. Data collected from the participants concerning their race indicated that 66% (73 individuals) were Caucasian, with African-Americans comprising the second largest group of participants 13% (12 individuals).

Table 1

Participant Demographics

Age00 $18 - 24$ 00 $25 - 34$ 1416 $35 - 44$ 2224 $45 - 54$ 2831 $55 - 64$ 2022 $65 - 74$ 56 75 or older11Gender11Female5662Male3438RaceWhite6673Black1213American Indian11Asian33Native Hawaiian or other Pacific Islander00Himania11	Demographic	п	%
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Age		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	18 - 24	0	0
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	25 - 34	14	16
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	35 - 44	22	24
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	45 - 54	28	31
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	55 - 64	20	22
75 or older11Gender5662Male3438Race6673Black1213American Indian11Asian33Native Hawaiian or other Pacific Islander00Himmin11	65 - 74	5	6
Gender5662Female5662Male3438Race6673Black1213American Indian11Asian33Native Hawaiian or other Pacific Islander00Hispania11	75 or older	1	1
Female5662Male3438Race6673Black1213American Indian11Asian33Native Hawaiian or other Pacific Islander00Hispania11	Gender		
Male3438Race6673White6673Black1213American Indian11Asian33Native Hawaiian or other Pacific Islander00Hispania11	Female	56	62
Race6673White6673Black1213American Indian11Asian33Native Hawaiian or other Pacific Islander00Hispania11	Male	34	38
White6673Black1213American Indian11Asian33Native Hawaiian or other Pacific Islander00Hispania11	Race		
Black1213American Indian11Asian33Native Hawaiian or other Pacific Islander00Hispania11	White	66	73
American Indian11Asian33Native Hawaiian or other Pacific Islander00Hispania11	Black	12	13
Asian33Native Hawaiian or other Pacific Islander00Hispania11	American Indian	1	1
Native Hawaiian or other Pacific Islander00Hispania11	Asian	3	3
Hispania 1 1	Native Hawaiian or other Pacific Islander	0	0
	Hispanic	1	1
Other 7 8	Other	7	8

Note. Due to rounding error, some percentages may not sum to 100%

Of the 90 participants, a total of 52% (64 individuals) of the participants had received a doctoral degree and 20% (25 individuals) reported having a master's degree. Participants were overwhelmingly more likely to be nontenured, not on a tenure track (n = 62) than tenured (n = 17), and an adjunct professor (n = 36) instead of a full (n = 11) or assistant (n = 14) professor (see Table 2). Over one-third of the participants had over 10 years of teaching experience (28 individuals or 31% of the participants), 23 individuals or 26% of the participants between 2 to 5 years, and 21 individuals or 23% of the participants or between 5 and 8 years of teaching experience at the postsecondary level.

Table 2

Academic and Employment Demographics

Demographic	n	%
Highest level of schooling		
Associates degree	1	1
Bachelor's degree	1	1
Some Master's degree courses	1	1
Master's degree	25	28
Some Doctoral degree courses	11	12
Doctoral degree	48	53
Tenure		
Tenured	17	20
Nontenured	62	71
Currently on a tenure track	8	9
Faculty rank	÷	-
Full Professor	11	12
Assistant professor	14	16
Associate Professor	6	7
Instructor	9	10
Lecturer	8	9
Adjunct Professor	36	40
Rank not applicable	2	2
Other	4	4
Years since last degree was conferred	-	-
Less than 1	10	11
1 - 2	14	16
3 – 5	25	28
6-10	15	17
More than 10	26	29
Total number of years of postsecondary teaching experience		
0-2	12	13
2-5	23	26
5 - 8	21	23
8 - 10	6	7
More than 10	28	31
Length of time at current institution (in years)		• -
0-2	28	317
2 - 5	26	29
5 - 8	11	12
8 - 10	6	7
More than 10	18	20

Note. Due to rounding error, some percentages may not sum to 100%

Descriptive Statistics

Descriptive statistics for the predictor variable CETO and outcome variables POS, JS, AC, CC, and NC are presented in Table 3. The mean score for the survey of POS was within the norms reported by Eisenberger et al. (1986). Although the mean scores varied dependent upon the industry being surveyed, the means for all industries fell between 5.67 and 2.88. The mean score found for the participants in the current study of 142.31 for the total JS score was within the norms found by Spector (1985), where the average scores from different industries across the United States ranged from 145.5 to 129. Based on research by Allen and Meyer (1990), the AC responses from the participants in this study had a lower mean (4.282) than the previously reported mean for the scale (4.63). Similarly, the mean CC score from the participants in the current study was also lower (4.376) as compared to the mean reported score (4.51) from previous research. The mean for NC survey responses (3.79) was the closest of all the survey instruments used in terms of its similarity to previously reported response means (3.77; Allen & Meyer, 1990). Based on previous literature, all of the responses to the survey instruments seemed to be close to previously reported norms for each measure.

Table 3

Tools	п	Cronbach's	М	SD	Skewness	SE	Kurtosis	SE
		Alpha						
CETO	90	-	4.62	1.094	2.516	0.234	6.558	0.463
POS	90	0.798	4.168	6.586	-0.085	0.234	-0.849	0.463
JS	90	0.895	142.308	23.841	0.243	0.234	0.242	0.463
AC	90	0.872	4.282	1.284	-0.305	0.234	-0.111	0.463
CC	90	0.812	4.376	1.377	-0.211	0.234	-0.265	0.463
NC	90	0.787	3.79	0.921	-0.140	0.234	0.600	0.463

Descriptive Statistics for CETO and Outcome Variables

Correlation Analysis

Pearson correlations were run for the predictor and outcome variables, the results are noted below (see Table 4). POS positively correlates with JS $r_{(90)} = 0.611$, p < 0.01 (2-tailed), and AC with $r_{(90)} = 0.425$, p < 0.01 (2-tailed). AC positively correlates with JS $r_{(90)} = 0.646$, p < 0.01 (2-tailed), and with NC $r_{(90)} = 0.408$, p < 0.01 (2-tailed). All other correlations were not significant (see Table 4).

Table 4

Predictor and Outcome Variable Correlational Analysis

	CETO	POS	JS	AC	CC	
NC	0.100	0.148	-0.042	0.408**	0.132	
CETO	-	0.79	0.125	0.046	0.062	
POS		-	0.611**	0.425**	-0.150	
JS			-	0.646**	-0.150	
AC				-	0.006	
Note **n <	< 0.01					

Note. ***p* < 0.01

Multiple Regression Assumptions

To conduct the hierarchical linear regression moderation analyses on the data collected for the study, several assumptions had to be met before analysis began. There were a total of 123 individuals who initially participated in the study. After removing individuals who did not answer any of the questions on the survey and those who experienced technical difficulties and were not able to finish the survey, there were a total of 107 participants left. With these 107 response sets, a check for outliers was performed by creating a boxplot (See Table 5 and Figure 1 in Appendix H).

Table 5

	Ca	Cases		sing	To	tal
	N	%	N	%	N	%
CETO	107	100	0	0	107	100
POS	107	100	0	0	107	100
JS	107	100	0	0	107	100
AC	107	100	0	0	107	100
CC	107	100	0	0	107	100
NC	107	100	0	0	107	100

Case Processing Summary for Predictor and Outcome Variables

The boxplot showed a total of 17 outliers that were significantly different from the others within the data for all of the variables (greater than three standard deviations). These 17 outliers were removed from the dataset, and the box plot for the predictor and outcome variables was rerun. After removing the 17 cases that were outliers, a total of 90 cases were left for data analysis (See Table 6 and Figure 2 in Appendix H).

After outliers were removed, tests for linearity were conducted on the data (see Figures 5, 8, 11, 14, and 17 in Appendix H). The results of the tests suggested that linearity in all five equations could be assumed. For each figure, to show linearity, there must be two imaginary parallel lines that can be drawn to encompass all of the data points between the predictor and outcome variable. In examining the linearity for CETO and POS, two imaginary parallel lines can be drawn (between -1 and 2), excluding three outliers, suggesting that the graph can be divided in half into two equal sections with an imaginary line (see Figure 5 in Appendix H). This confirms linearity for POS and CETO.

The test for linearity between CETO and JS showed that two parallel imaginary lines can be drawn (between -1 and 2), excluding four outliers, suggesting that the data met the assumption of linearity since the graph can be divided by an imaginary line and split into two equal sections (See Figure 8 in Appendix H). The test for linearity between OC and CETO was conducted individually for AC, CC, and NC. The linearity test for AC and CETO allows for two imaginary parallel lines to be drawn (between -1 and 2), excluding three outliers (see Figure 11 in Appendix H). These data points meet the assumption of linearity since the graph can be divided by an imaginary line and be split into two equal sections. The linearity between CETO and CC is established because two imaginary parallel lines can be drawn (between -1 and 2), excluding three outliers, allowing the graph to be bisected by an imaginary line into two equal sections (see Figure 14 in Appendix H). Finally, the scatterplot of the data of CETO predicting NC (see Figure 17 in Appendix H) shows that the assumption of linearity has been met because two imaginary parallel lines can be drawn (between -2 and 1), excluding three outliers, allowing the graph to be bisected by a line dividing the graph into two equal parts.

To test for normality, histograms and probability plots were used for each of the regression analyses. The histogram for CETO and POS suggests that the data are normally distributed. All of the data approximate a bell curve (see Figure 3 in Appendix H). Additionally, the *p*-plot for the regression for CETO and POS shows that the data approximate a line, allowing for the assumption that normality has been met in the

equation (see Figure 4 in Appendix H). The histogram for CETO and JS suggests that the data are normally distributed. All of the data approximate a bell curve (see Figure 6 in Appendix H). The *p*-plot for the regression between CETO and JS show the data approximating a line, allowing for the assumption that normality has been met in the equation (see Figure 7 in Appendix H). The histogram for CETO and AC suggests that the data are normally distributed. All of the data approximate a bell curve (see Figure 9 in Appendix H). The *p*-plot for the regression for CETO and AC shows that the data approximate a line, allowing for the assumption that normality has been met in the equation (see Figure 10 in Appendix H). The histogram for CETO and CC show that the data are normally distributed. All of the data approximate a bell curve (see Figure 12 in Appendix H). The *p*-plot for the regression of CETO and CC shows that the data approximate a line, allowing for the assumption that normality has been met in the equation (see Figure 13 in Appendix H). The histogram for CETO and NC suggest that the data are normally distributed. The data approximate a bell curve (see Figure 15 in Appendix H). The *p*-plot for the regression for CETO and NC shows that the data approximate a line, allowing for the assumption that normality has been met in the equation (see Figure 16 in Appendix H).

Finally the Shapiro-Wilk's test of normality was used to statistically verify the normality of the data. The results are presented in Table 6. Values between 0 and 1 were considered within parameters for a normal distribution. Based on the results, all of the data approximated a normal distribution allowing for further analysis by correlation and also regression.

Table 6

Variable	Statistic	df	Significance
POS	0.967	107	0.014
JS	0.969	107	0.009
AC	0.973	107	0.030
CC	0.975	107	0.045
NC	0.982	107	0.146
CETO	0.673	107	0.000

Shapiro-	Wilk's	Test	Resul	ts
----------	--------	------	-------	----

Multiple Regression Analysis

Research Question 1

Is there a relationship between postsecondary faculty CETO and POS? To address Research Question 1, a hierarchical linear multiple regression moderation analysis was conducted to determine the ability of postsecondary faculty CETO (predictor variable) to predict POS scores (outcome variable). Before the hierarchical linear multiple regression moderation analysis was conducted, the assumptions for normality were assessed. Normality was assessed visually using a histogram and using normal Probability-Probability plots (P-P plot), and the plots did not deviate greatly from the normal line, which suggested that the assumption was met for the analysis. Homoscedasticity was assessed visually using residuals scatterplots. The plots did not deviate greatly from a rectangular distribution, which meant that this assumption was also met. VIFs were examined to assess for multicollinearity, and the VIF was not above 3.00; therefore, multicollinearity did not exist (see Appendix H for Figures 1-3 depicting the respective histogram, P-P plot, and scatterplot). For the regression predicting POS scores, no statistical significance was found with $R^2 = 0.010$, Adjusted $R^2 = -0.001$, and $F_{(1,88)} = 0.928$, p< 0.338 (alpha = 0.016). Therefore the null hypothesis could not be rejected, and there is no relationship between the number of CETO offered to postsecondary faculty and POS as assessed by the SPOS (see Table 7).

Table 7

Regression With CETO Predicting POS

Source	R	R^2	Adj. R^2	В	SE	β	t	р
CETO	0.102	0.010	-0.001	0.034	0.035	0.102	0.964	0.338
Note. F_0	1,88) = 0.9	928						

Research Question 2

Is there a relationship between postsecondary faculty CETO and JS? To address Research Question 2, a hierarchical linear multiple regression moderation analysis was conducted to determine the ability of postsecondary faculty CETO (predictor variable) to predict JS scores (outcome variable). Before the hierarchical linear multiple regression moderation analysis was conducted the assumptions for normality were assessed. Normality was assessed visually using a histogram and using normal P-P plots, and the plots did not deviate greatly from the normal line, which suggested that the assumption was met for the analysis. Homoscedasticity was assessed visually using residuals scatterplots. The plots did not deviate greatly from a rectangular distribution, which meant that this assumption was also met. VIFs were examined to assess for multicollinearity and the VIF was not above 3.00 therefore multicollinearity did not exist. (see Appendix H for Figures 4-6 depicting the respective histogram, P-P plot, and scatterplot).

For the regression predicting JS scores, no statistical significance was found with $R^2 = 0.016$, Adjusted $R^2 = 0.004$, and $F_{(1,88)} = 1.392$, p<0.241 (alpha = 0.016). Therefore the null hypothesis could not be rejected and there is no relationship between the number of CETO offered to postsecondary faculty and JS as assessed by the JSS (see Table 8). Table 8

Regression With CETO Predicting JS

Source	R	R^2	Adj. R^2	В	SE	β	t	р
CETO	0.125	0.016	0.004	0.737	0.624	0.125	1.180	0.241
<i>Note</i> . $F_{(1.88)} = 1.392$								

Research Question 3

Is there a relationship between faculty CETO and OC? To address Research Question 3, a hierarchical linear multiple regression moderation analysis was conducted to determine the ability of postsecondary faculty CETO (predictor variable) to predict OC scores (outcome variable). The OC score is composed of three different scores, AC, CC, and NC. Before the hierarchical linear multiple regression moderation analysis was conducted the assumptions for normality were assessed. Normality was assessed visually using histograms and normal P-P plots, and the plots did not deviate greatly from the normal line, which suggested that the assumption was met for the analysis.

Homoscedasticity was assessed visually using residuals scatterplots. The plots did not deviate greatly from a rectangular distribution, which meant that this assumption was also met. VIFs were examined to assess for multicollinearity and the VIF was not above 3.00 therefore multicollinearity did not exist. (see Appendix H for the figures depicting the respective histograms (Figures 7, 10, and 13), P-P plot (Figures 8, 11, and 14), and scatterplot (Figures 9, 12, and 15).

For the regression predicting AC scores, no statistical significance was found with $R^2 = 0.004$, Adjusted $R^2 = -0.008$, and $F_{(1,88)} = 0.314$, p< 0.577 (alpha = 0.016).

Therefore the null hypothesis could not be rejected and there is no relationship between

the number of CETO offered to postsecondary faculty and AC as assessed by the

TCMECS (see Table 9).

Table 9

Regression With CETO Predicting AC

Source	R	R^2	Adj. R ²	В	SE	β	t	р
CETO	0.60	0.004	-0.008	0.021	0.037	0.060	0.560	0.577
<i>Note</i> . $F_{(1,88)} = 0.3$	314							

For the regression predicting CC scores, no statistical significance was found with $R^2 = 0.022$, Adjusted $R^2 = 0.011$, and $F_{(1,88)} = 1.988$, p< 0.162 (alpha = 0.016). Therefore the null hypothesis could not be rejected and there is no relationship between the number of CETO offered to postsecondary faculty and CC as assessed by the TCMECS (see Table 10).

Table 10

Regression With CETO Predicting CC

Source	R	R^2	Adj. R^2	В	SE	β	t	р
CETO	0.149	0.022	0.011	0.055	0.039	0.149	1.410	0.162
Note. $F_{(1)}$	$_{,88)} = 1.988$	3						

For the regression predicting NC scores, no statistical significance was found with $R^2 = 0.016$, Adjusted $R^2 = 0.005$, and $F_{(1,88)} = 1.440$, p< 0.233 (alpha = 0.016). Therefore, the null hypothesis could not be rejected and there is no relationship between the number of CETO offered to postsecondary faculty and NC as assessed by the TCMECS (see Table 11).

Table 11

Regression With CETO Predicting NC

Source	R	R^2	Adj. R^2	В	SE	β	t	р
CETO	0.127	0.016	0.005	-0.031	0.026	-0.127	-1.200	0.233
<i>Note.</i> $F_{(1,88)} = 1$	1.440							

Research Question 4

Does gender moderate the relationship between postsecondary faculty CETO and POS? To address Research Question 4 a hierarchical linear multiple regression moderation analysis was conducted to determine the moderating effect of gender (moderator variable) on the relationship between postsecondary CETO (predictor variable) and POS (outcome variable). VIFs were examined to assess for multicollinearity and were not above 3.00 therefore multicollinearity did not exist. Due to the absence of multicollinearity the variables were not standardized or centered.

An interaction variable was created for the hierarchical linear multiple regression moderation analysis between the variable "Gender" and the variable "CETO"

(CETO x Gender). When conducting a moderation analysis the interaction variable should be a statistically significant predictor within the model while in the presence of its parent variables. Results of the regression analysis for the variable CETO x Gender did not indicate a significant model with $R^2 = 0.015$, Adjusted $R^2 = -0.019$, and $F_{(3.86)} = 0.438$, p < 0.727 (alpha = 0.016), and therefore the interaction term was not a statistically significant predictor within the model, p = 0.695, B = -0.031. The null hypothesis could not be rejected and therefore moderation was not supported within the model (see Table 12).

Table 12

Model	R	R^2	Adj. R^2	В	SE	β	t	р	Sig
1. Constant	0.102	0.010	-0.001	3.991	0.163		24.451	0.338 ^a	
CETO				0.034	0.035	0.102	0.964		0.338
2. Constant	0.115	0.013	-0.009	4.039	0.190		21.215	0.560 ^b	
CETO				0.033	0.035	0.100	0.937		0.351
Gender				-0.121	0.243	-0.053	-0.499		0.619
3. Constant	0.123	0.015	-0.019	4.068	0.205		19.844	0.727°	
CETO				0.024	0.042	0.074	0.585		0.560
Gender				-0.219	0.348	-0.096	-0.629		0.531
CETO_x_				0.031	0.079	0.065	0.393		0.695
Gender									
Note. a. $F_{(1,88)}$	= 0.928								

Moderation Analysis of Gender and CETO Predicting POS

b. $F_{(2,87)} = 0.585$ c. $F_{(3,86)} = 0.438$

Research Ouestion 5

Does gender moderate the relationship between postsecondary faculty CETO and JS? To address Research Question 5 a hierarchical linear multiple regression moderation analysis was conducted to determine the moderating effect of gender (moderator

variable) on the relationship between postsecondary CETO (predictor variable) and JS (outcome variable). VIFs were examined to assess for multicollinearity and were not above 3.00 therefore multicollinearity did not exist. Due to the absence of multicollinearity the variables were not standardized or centered.

An interaction variable was created for the hierarchical linear multiple regression moderation analysis between the variable "Gender" and the variable "CETO" (CETO_x_Gender). When conducting a moderation analysis, the interaction variable should be a statistically significant predictor within the model while in the presence of its parent variables. Results of the regression analysis for the variable CETO_x_Gender did not indicate a significant model with $R^2 = 0.020$, Adjusted $R^2 = -0.014$, and $F_{(3,86)} = 0.587$, p<0.625 (alpha = 0.016), and therefore the interaction term was not a statistically significant predictor within the model, p = 0.588, B = -0.766. The null hypothesis could not be rejected and therefore moderation was not supported within the model (see Table 13).

Model	R	R^2	Adj. R^2	В	SE	β	t	р	Sig
1. Constant	0.125	0.016	0.004	138.366	2.915		47.467	0.241ª	
CETO				0.737	0.624	0.125	1.180		0.241
2. Constant	0.129	0.017	-0.006	138.913	3.403		40.818	0.481 ^b	
CETO				0.728	0.628	0.123	1.159		0.250
Gender				-1.375	4.350	-0.034	-0.316		0.753
3. Constant	0.142	0.020	-0.014	138.198	3.661		37.745	0.625°	
CETO				0.941	0.742	0.159	1.268		0.208
Gender				1.030	6.215	0.025	0.166		0.869
CETO_x_				-0.766	1.407	-0.089	0.544		0.588
Gender									
Note o E.	-1.202								

Moderation Analysis of Gender and CETO Predicting JS

Note. a. $F_{(1,88)} = 1.392$

b. $F_{(2,87)} = 0.739$

c. $F_{(3\,86)} = 0.587$

Research Question 6

Does gender moderate the relationship between postsecondary faculty CETO and OC? To address Research Question 6 a hierarchical linear multiple regression moderation analysis was conducted to determine the moderating effect of gender (moderator variable) on the relationship between postsecondary CETO (predictor variable) and AC, CC, and NC, (outcome variables), which together make up an individual's OC. VIFs were examined to assess for multicollinearity and were not above 3.00 therefore multicollinearity did not exist. Due to the absence of multicollinearity the variables were not standardized or centered.

An interaction variable was created for the hierarchical linear multiple regression moderation analysis between the variable "Gender" and the variable "CETO" (CETO x Gender). When conducting a moderation analysis the interaction variable

should be a statistically significant predictor within the model while in the presence of its parent variables.

Affective commitment. The first moderation analysis was for the AC

component of OC. Results of the regression analysis for the variable CETO_x_Gender did not indicate a significant model with R² of 0.020, Adjusted R² = -0.015, and $F_{(3,86)}$ = 0.580, p<0.630 (alpha = 0.016), and therefore the interaction term was not a statistically significant predictor within the model, p = 0.885, *B* = -0.012. The null hypothesis could not be rejected and therefore moderation was not supported within the model (see Table 14).

Table 14

Model	R	R^2	$Adj. R^2$	В	SE	β	t	р	Sig
1. Constant	0.060	0.004	-0.008	4.209	0.174		24.202	0.577ª	
CETO				0.021	0.037	0.060	0.560		0.577
2. Constant	0.140	0.020	-0.003	4.086	0.201		20.281	0.423 ^b	
CETO				0.023	0.037	0.065	0.612		0.542
Gender				0.307	0.258	0.127	1.192		0.236
3. Constant	0.141	0.020	-0.015	4.075	0.217		18.768	0.630 ^c	
CETO				0.026	0.044	0.075	0.594		0.554
Gender				0.345	0.369	0.142	0.937		0.352
CETO_x_				-0.012	0.083	-0.024	-0.146		0.885
Gender									

Moderation Analysis of Gender and CETO Predicting AC

Note. a. $F_{(1,88)} = 0.314$

b. $F_{(2,87)} = 0.868$

c. $F_{(3,86)} = 0.580$

Continuance commitment. The second hierarchical linear multiple regression moderation analysis was for the CC component of OC. Results of the regression analysis

for the variable CETO_x_Gender did not indicate a significant model with $R^2 = 0.053$,

Adjusted $R^2 = 0.020$, and $F_{(3,86)} = 1.607$, p<0.194 (alpha = 0.016), and therefore the

interaction term was not a statistically significant predictor within the model, p = 0.162, B = -0.122. The null hypothesis could not be rejected and therefore moderation was not supported within the model (see Table 15).

Table 15

Moderation Analysis of Gender and CETO Predicting CC

Model	R	R^2	Adj. R^2	В	SE	β	t	р	Sig
1. Constant	0.149	0.022	0.011	4.274	0.182		23.477	0.162 ^a	
CETO				0.055	0.039	0.149	1.410		0.162
2. Constant	0.177	0.031	0.009	4.372	0.212		20.653	0.252 ^b	
CETO				0.053	0.039	0.145	1.368		0.175
Gender				-0.245	0.271	-0.096	-0.905		0.368
3. Constant	0.230	0.053	0.020	4.486	0.226		19.890	0.194°	
CETO				0.019	0.046	0.053	0.426		0.672
Gender				-0.629	0.383	-0.245	-1.642		0.104
CETO_x_				-0.122	0.087	0.227	-1.409		0.162
Gender									
<i>Note.</i> a. $F_{(1,88)}$	= 1.988								

b. $F_{(2,87)} = 1.402$

c. $F_{(3.86)} = 1.607$

Normative commitment. The third hierarchical linear multiple regression moderation analysis was for the NC component of OC. Results of the regression analysis for the variable CETO_x_Gender did not indicate a significant model with $R^2 = 0.049$, Adjusted $R^2 = 0.016$, and $F_{(3,86)} = 1.478$, p<0.226 (alpha = 0.016), and therefore the interaction term was not a statistically significant predictor within the model, p = 0.541, B = -0.035. The null hypothesis could not be rejected and therefore moderation was not supported within the model (see Table 16).

Table 16

Model	R	R^2	$Adj. R^2$	В	SE	β	t	р	Sig
1. Constant	0.127	0.016	0.005	3.894	0.121		32.158	0.233ª	
CETO				-0.031	0.026	-0.127	1.200		0.233
2. Constant	0.212	0.045	0.023	3.779	0.139		27.117	0.136 ^b	
CETO				-0.029	0.026	-0.127	-1.140		0.257
Female				0.288	0.178	0.170	1.619		0.109
3. Constant	0.221	0.049	0.016	3.812	0.150		25.437	0.226 ^c	
CETO				-0.039	0.030	-0.160	-1.288		0.201
Female				0.177	0.254	0.104	0.697		0.487
CareerOPs_				-0.035	0.058	0.099	0.613		0.541
x_female									
Note o E	-1.440								

Moderation Analysis of Female Gender and CETO Predicting NC

Note. a. $F_{(1,88)} = 1.440$

b. $F_{(2,87)} = 2.044$

c. $F_{(3\,86)} = 1.478$

Summary and Transition

Chapter 4 presented the demographic characteristics of the participants, the significance of the interaction between the variables, an analysis of the data that were collected, and the tests that were used to reject or fail to reject the null hypotheses. Outliers were removed from the data before any tests of assumptions were performed. Before beginning the correlational analysis, several assumptions were met using measures including histograms, the Shapiro-Wilk's test, p-plots, and scatterplots. All assumptions were met (normality, collinearity, and linearity), A correlational analysis was run between the variables to determine if there was a relationship between the variables. The results of the correlational analysis did not suggest a relationship between the predictor and outcome variables however a moderation analysis was run to see if the moderating variable "Gender" had any effect on the relationship between the predictor variable and the outcome variables. A hierarchical linear multiple regression moderation analysis was run between the predictor and outcome variables and was used to address

Research Questions 1, 2, and 3. All of the moderation analyses failed to find a statistically significant effect of the moderator variable on the relationship between the predictor and outcome variables.

A Bonferroni correction was made to the data to account for the possibility of increased Type I error due to multiple regression analyses. Research Question 1 sought to examine the relationship between POS and CETO. The results of this analysis did not yield a statistically significant result and the null hypothesis was not rejected. Research Question 2 examined the relationship between CETO and JS. The analysis of information collected using the data from the JSS showed no statistically significant relationship between CETO and JS. The analysis of information between CETO and JS. The Research Question 3 concerned the relationship between OC and CETO. OC was broken down into three different components AC, CC, and NC, and a different portion of the TCMECS measured each component. A separate regression analysis was conducted for each of the three components. The results of the regression analyses for AC, CC, and NC were all not statistically significant and the null hypothesis could not be rejected as a result for AC, CC, or NC.

Hierarchical linear regression moderation analyses were conducted to answer Research Questions 4, 5, and 6. Gender was used as the moderating variable for each of the relationships. Research Question 4 was a moderation analysis conducted to see if gender had any statistically significant effect on the relationship between POS and CETO. The moderation analysis did not find that gender had a statistically significant effect on the relationship between CETO and POS and the null hypothesis could not be rejected. Research Question 5 was a moderation analysis on the relationship between JS and CETO. The results of the moderation were not statistically significant and the null hypothesis was not rejected. Research Question 6 consisted of three different moderation analyses that examined the amount that the variable gender affected the relationship between CETO and the OC (which was broken down into it sub-parts for analysis, AC, CC, and NC). The results of each of these three analyses were not statistically significant and did not allow the null hypothesis to be rejected.

Chapter 5 includes an overview of the study, and summary and discussion of the data analyses results. A discussion of the ways in which this information can positively affect social change follows the data analyses discussion. Finally, the limitations of the study are presented with implications for future research.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this study was to bridge the gap between academic institutional needs to attract more female faculty and subsequently retain them to foster a diverse organization by identifying possible causes of attrition. One such potential reason that women are less likely to stay with an organization is because they do not feel they receive the training and skills necessary to compete with male colleagues (August & Waltman, 2004; Harper et al., 2001). At the time of this study, no known literature had been published that examined the effect of CETO on an employees' POS, JS, or OC. Additionally, I sought to determine if the relationship between CETO and POS, JS, and OC would be affected by the gender.

The theory behind the focus questions was rooted in OST and the job characteristics model; both of these theories have been linked to POS, JS, and OC to varying degrees. OST suggests that employees assign human-like characteristics to their organization in an attempt to provide some logic to the actions their organization takes either for or against them (Eder & Eisenberger, 2008; Levinson, 1965). This humanization of the organization allows the employee to determine to what degree his or her organization cares about him or her and supports his or her work, affecting the employee's POS and his or her OC (Ganzach et al., 2006).

Hackman and Oldham's (1976) job characteristics model attempts to explain how employees develop JS and posits five factors are involved that influence three different psychological states of an employee, which impact his or her JS: absenteeism, motivation, and the work effectiveness. According to this model, an organization meets the needs of its employees by providing work and task variety, meaningful work, allows the employee to take personal responsibility for his or her work, and ensures the employee is aware of the outputs of his or her work efforts (Oldham et al., 1976; Wright & Kim, 2004).

Faculty members from different postsecondary institutions were asked to complete an online survey concerning his or her feelings about his or her POS, JS, and OC. Using hierarchical linear regression moderation analyses, I examined six specific research questions:

- 1. Is there a relationship between postsecondary faculty CETO and POS?
- 2. Is there a relationship between postsecondary faculty CETO and JS?
- 3. Is there a relationship between postsecondary faculty CETO and OC?
- 4. Does gender moderate the relationship between postsecondary faculty CETO and POS?
- 5. Does gender moderate the relationship between postsecondary faculty CETO and JS?
- 6. Does gender moderate the relationship between postsecondary faculty CETO and OC?

The results of the analyses using CETO as the predictor variable and POS, JS, and OC as outcome variables were not statistically significant, and as a result, the null hypothesis for Research Questions 1, 2, and 3 could not be rejected. Moderation analyses were conducted to answer Research Questions 4, 5, and 6. Each of these moderation analyses
was not statistically significant, and the null hypothesis for each one could not be rejected.

This chapter provides an overview of the study, and a summary and explanation of the analyses that were discussed previously in Chapter 4. Before analyzing the data, all questions that were negatively worded on the scales were recoded to match the nonnegatively worded questions. Data were collected from a 123 participants, via Survey Monkey, but due to some respondents not completing all of the instruments, only 107 were included in the final data analyses. Participants who failed to answer a question on one of the summaries were assigned a calculated group mean for the missing value.

Interpretation of Findings

The null hypothesis was not rejected for Research Question 1. The predictor variable CETO and the outcome variable POS were used to run a regression analysis to determine if there was any statistically significant relationship. The results suggest that for this study, there was not a relationship between the predictor and the outcome variable that was statistically significant. The null hypothesis for Research Question 2 was not rejected. The predictor variable CETO and the outcome variable JS were used in a regression analysis, and the results did not indicate the presence of a statistically significant relationship between the two variables. For Research Question 3, the predictor variable CETO and the outcome variable OC were used in a regression analysis. Because the TCMECS is composed of three different surveys that measure three different components of OC, AC, CC, and NC, there were three different analyses run to determine if there was a relationship between CETO and OC. For a relationship to exist between CETO and OC, each of the regression analyses for AC, CC, and NC needed to be statistically significant. The results of the regression analyses for AC, CC, and NC were not statistically significant. Each of these regression analyses showed no statistically significant relationship with the predictor variable; consequently, the null hypothesis for Research Question 3 was not rejected.

Research Questions 4, 5, and 6 were all related to the probability that gender acted as a moderator variable between the CETO and POS, JS, and OC. These moderation analyses were run even though there was not a significant result for the previous research because there was a possibility of a statistically significant gender effect on the relationship between the predictor and the outcome variables. There was no statistically significant result for the moderation analysis involving gender, POS, and CETO; therefore, the null hypothesis for Research Question 4 was not rejected. Research Question 5 was answered by a moderation analysis with gender serving as the moderating variable on the relationship between CETO and JS. The results of the moderation analysis were not statistically significant; therefore, the null hypothesis for Research Question 5 was not rejected. Research Question 6 was answered by a moderation analysis with gender as the moderating variable of the relationship between CETO and OC. Since OC is composed of AC, CC, and NC, there were three different moderation analyses run each featuring a different outcome variable (AC, CC, or NC). None of the moderation analyses (AC, CC, and NC) were statistically significant and the null hypothesis for Research Question 6 was not rejected. A summary of the results of the hypothesis testing is found in Table 17.

Table 17

Summary of Hypothesis Testing Results

Null hypothesis	Result
H_0 1: There is no relationship between the number of	Did not reject the null hypothesis
CETO offered to postsecondary faculty and POS as	5 51
assessed by the SPOS	
$H_{0}2$: There is no relationship between the number of	Did not reject the null hypothesis
CETO offered to postsecondary faculty and JS as	5 51
assessed by the JSS	
H_03 : There is no relationship between the number of	Did not reject the null hypothesis
CETO offered to postsecondary faculty and OC as	5 51
assessed by the TCMECS	
H_04 : Gender does not moderate the relationship	Did not reject the null hypothesis
between the number of CETO offered to	5 51
postsecondary faculty and POS	
H_05 : Gender does not moderate the relationship	Did not reject the null hypothesis
between the number of CETO offered to	
postsecondary faculty and JS	
H_06 : Gender does not moderate the relationship	Did not reject the null hypothesis
between the number of CETO offered to	
postsecondary faculty and OC	

Implications for Social Change

This study can help organizations identify the importance of offering CETO to their workers as an incentive to keep raise or keep high an employee's POS, JS, and OC. Research has shown that POS, JS, and OC are linked to turnover, absenteeism, employee helpfulness, and productivity (Hackman & Oldham, 1976; Mitchell, & Ambrose, 2007; Van Knippenberg et al., 2007; Yoon & Thye, 2002). Keeping each of these factors high can help lower organizational costs associated with employees. Employees who have high POS, JS, and OC are less likely to leave the organization in search of a different job, meaning the organization can keep employees who have valuable skills sets, saving the organization money related to training and recruiting new employees (Abassi & Holman, 2000; Tansky & Cohen, 2001).

Additionally, employees who have high levels of OC are less likely to be absent from work, reducing lost productivity time for the organization (Abbasi & Hollman, 2000). Employees with high levels of POS and JS are more likely to engage in organizational citizenship behaviors, those actions that result in a benefit to the organization but are not required by the employee's job description (Johnson & Chang, 2006; Meyer & Allen, 1991).

For postsecondary institutions in particular, research has shown that having a diverse group of students is related to the diversity of the faculty at the institution. The success and/or failure of the students in many disciplines is related to the types of role models that students see in the form of the professors. For example, if a female wants to be a physics major, she is more likely to complete her program and graduate from the university if there are also female physics professors (Ashworth & Evans, 2001; Callister, 2006). This shows the student that she can achieve in the discipline and provides her the opportunity to have a mentor in her field. The same could be said of male students who aspire to be nurses. Having male professors in the degree-related classes can help a male student see that the field is open to him as a male and also provides him with the opportunity for a male mentor in his field of study (Rask & Bailey, 2002).

Today, globalization has changed the way that business is conducted all over the world (Eagly & Chin, 2010). The need for diversity in organizations is not only wanted but now a requirement for successful business ventures (Van Dick et al., 2006). To

achieve that end, organizations can create positive social change by reviewing the policies they have in an effort to allow for more diverse workgroups and leaders. In all organizations, finding individuals who can lead that represent different cultures, genders, races, ages, and religions can increase their ability to recruit and retain workers who will keep the workforce diverse (Coyle-Shapiro, Taylor, & Tetrick, 2004; Rousseau, 1998). For postsecondary institutions in particular, graduating individuals from different backgrounds is part of their role in society, and to achieve that end and continue to remain relevant to society, they too must make sure their faculty members represent the diversity now desired in the workplace.

Limitations of the Study

One large limitation to the study was the willingness of individuals to take the online survey. Although the link was posted to several discussion areas on the LinkedIn website and also to the Walden Participant Pool, garnering enough participants to meet the minimum requirement for the study proved to be a constant challenge. Another limitation was the lack of completion of all the surveys that were presented. It is possible that the participants suffered from "respondent fatigue" due to the length of the entire survey (Krosnick, 1999; Porter, Whitcomb, & Weizner, 2004). Due to the length of each of the measurement tools and also the demographic survey, some participants may have found that they were spending more time than they wished on the survey and decided to stop part of the way though one of the surveys (Krosnick, 1999). Respondent fatigue is a phenomenon common in survey research whereby the participants' response rate and/or quality of responses begins to decline towards the middle or end of a survey (Krosnick,

1999). The participants were not asked to provide a reason for not completing the survey in its entirety, so this is merely a guess about the reason that the participant did not complete the survey. Also of note was that for some of the participants who finished at least one of the surveys, the group mean was calculated, and their missing responses were assigned this number. While this is an established practice within research-related disciplines, there is a possibility that the numbers may have been higher or lower than they might otherwise have been if the participants had completed the survey themselves (Krosnick, 1999). Because of this, the inability of the study to find statistical significance may in fact not be due to no relationship existing between the predictor variable and the outcome variables but in fact due to the change in the participants scores.

Recommendations for Further Study

The goals of this study were to determine if CETO were able to influence an employees' POS, JS, and OC. Additionally, I sought to determine if the gender of the individual receiving or not receiving CETO would affect POS, JS, and OC. The limitations of this study did not show any statistically significant results; however, this does not mean that the research questions were definitively answered. Due to the limitations of the study, there are additional ways in which future research should be conducted to see if a statistically significant result can be obtained.

Researchers who attempt to replicate this study should attempt to increase the sample size. Because it is believed that respondent fatigue may have been a cause of some participants not completing all of the sections of the survey, it may be beneficial to have a larger number of participants so that there are more individuals who complete the

entire survey for data analyses. It was noted that computing the group mean and replacing missing values with this number is a valid method of dealing with missing data during data clean-up and analyses; however, it would be ideal if this was not a necessary step in data clean-up. Future researchers may also want to consider only including those individuals who complete the study in its entirety. This would eliminate the need for a group mean to replace missing values but would require a much larger number of participants since any participant who did not complete the survey completely would not be included in the analysis.

If possible, future researchers may wish to recruit individuals directly via universities. This was not possible for the current study; however, it might allow the researcher to garner more responses to the surveys. Steps would have to be taken to ensure the anonymity of the participants, but it might be easier to reach the target population of the study if the researchers go directly to multiple institutions.

Finally, future researchers can extend this study by including additional demographics into the regression and moderation analyses. While I did ask participants for information such as race, salary, faculty status, and highest degree awarded, this information was not used as part of the data analyses. It may be beneficial to research and determine if the other demographic or academic information show a statistically significant result during moderation analyses. There are many different variables that can affect the relationship between CETO, POS, JS, and OC, and the relationship can be further affected by different variables, knowing which variables affect the relationship can be valuable information to organizations.

Conclusion

The purpose of this study was twofold: to determine if CETO could have any effect on the POS, JS, and OC of an employee and to determine if there was any way that the gender of the employee could have an effect on the relationship between CETO and POS, JS, or OC. There were no statistically significant results from the analyses of the data for the study. It is recommended that the study be replicated but with a larger sample size because it is suspected that based on past research, there should have been a statistically significant result, but the sample size for this study may have been too small. Organizations should look to perform studies similar to this one to stay informed about the needs and desires of their employees to ensure that the organization can attract and retain the most talented available. Understanding the needs of individuals of different genders is important to organizations if they wish to increase the diversity of their workforce or to continue to keep their workforce diverse.

References

- Abbasi, S. M., & Hollman, K. W. (2000). Turnover: The real bottom line. *Public Personnel Management*, 29(3), 333-342. doi: 10.1177/009102600002900303
- Allen, D. G., Bryant, P. C., & Vardaman, J. M. (2010). Retaining talent: Replacing misconceptions with evidence-based strategies. *Academy of Management Perspectives*, 24(2), 48-64. doi: 10.5465/AMP.2010.51827775
- Allen, D. G., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance, and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1-18. doi: 10.1111/j.2044-8325.1990.tb00506.x
- Allen, D. G., & Meyer, J. P. (1996). Affective, continuance, and normative commitment to the organization: An examination of construct validity. *Journal of Vocational Behavior, 49*(3), 252-276. doi: 10.1006/jvbe.1996.0043
- Allen, D. G., Shore, L. M., & Griffeth, R. W. (2003). The role of perceived organizational support and supportive human resource practices in the turnover process. *Journal of Management*, 29(1), 99-118. doi:

10.1177/0149206303029000107

- Anderson, N., & Schalk, R. (1998). The psychological contract in retrospects and prospects. *Journal of Organizational Behavior*, 19, 637-647. doi: 10.1002/(SICI)1099-1379(1998)19
- Armstrong-Stassen, M., & Ursel, N. D. (2009). Perceived organizational support, career satisfaction, and the retention of older workers. *Journal of Occupational and Organizational Psychology*, 82(1), 201-220. doi: 10.1348/096317908X288838

- Aselage, J., & Eisenberger, R. (2003). Perceived organizational support and psychological contracts: A theoretical integration. *Journal of Organizational Behavior, 24*(5), 491-509. doi: 10.1002/job.211
- Ashworth, J., & Evans, J. L. (2001). Modeling student subject choice at secondary and tertiary level: A cross-section study. *Journal of Economic Education*, 32(4), 311-320. doi: 10.1080/00220480109596111
- August, L., & Waltman, J. (2004). Culture, climate, and contribution: Career satisfaction among female faculty. *Research in Higher Education*, 45(2), 177-192. doi: 10.1023/B:RIHE.0000015694.14358.ed
- Bachen, C. M., McLoughlin, M. M., & Garcia, S. S. (1999). Assessing the role of gender in college students' evaluations of faculty. *Communication Education*, 48(3), 193-210. doi: 10.1080/03634529909379169
- Baranik, L. E., Roling, E. A., & Eby, L. T. (2010). Why does mentoring work? The role of perceived organizational support. *Journal of Vocational Behavior*, *76*(3), 366-373. doi: 10.1016/j.jvb.2009.07.004
- Baron, R. M., & Kenny, D. A. (1989). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173-1182. doi: 10.1037/0022-3514.51.6.1173
- Benard, S., & Correll, S. J. (2010). Normative discrimination and the motherhood penalty. *Gender and Society*, 24(5), 616-646. doi: 10.1177/0891243210383142

- Bikson, T. K., Treverton, G. F., Moini, J., & Lindstrom, G. (2003). New challenges for international leadership: Lesson from organizations with global missions. Santa Monica, CA: RAND.
- Brown, R. B. (1996). Organizational commitment: Clarifying the concept and simplifying the existing construct typology. *Journal of Vocational Behavior*, 49(3), 230-251.
 doi: 10.1006/jvbe.1996.0042
- Callister, R. R. (2006). The impact of gender and department climate on job satisfaction and intentions to quit for faculty in science and engineering fields. *Journal of Technology Transfer, 31*(3), 367-375. doi: 10.1007/s10961-006-7208-y
- Cable, D. M., & DeRue, D. S. (2002). The convergent and discriminant validity of subjective fit perceptions. *Journal of Applied Psychology*, 87(5), 875-884. doi: 10.1037//0021-9010.87.5.875
- Carlson, J. H., & Mellor, S. (2004). Gender-related effects in the job-design-job satisfaction relationship: An interactional approach. *Sex Roles*, *51*(3/4), 237-247. doi: 10.1023/B:SERS.0000037767.72299.bd
- Casper, W. J., & Buffardi. L. C. (2004). Work-life benefits and job pursuit intentions:
 The role of anticipated organizational support. *Journal of Vocational Behavior*, 65(3), 391-410. doi: 10.1016/j.jvb.2003.09.003
- Cassar, V., & Briner, R. B. (2011). The relationship between psychological contract breach and organizational commitment: Exchange imbalance as a moderator of the mediating role of violation. *Journal of Vocational Behavior*, 78(2), 283-289. doi: 10.1016/j.jvb.2010.09.007

- Clay-Warner, J., Reynolds, J., & Roman, P. (2005). Organizational justice and job satisfaction: A test of three competing models. *Social Justice Research*, *18*(4). doi: 10.1007/s11211-005-8567-5
- Chen, Z. X., & Francesco, A. M. (2003). The relationship between the three components of commitment and employee performance in China. *Journal of Vocational Behavior*, 62(3), 490-510. doi: 10.1016/S0001-8791(02)00064-7
- Cheng, Y., & Stockdale, M. S. (2003). The validity of the three component model of organizational commitment in a Chinese context. *Journal of Vocational Behavior*, 62(3), 465-489. doi: 10.1016/S0001-8791(02)00063-5
- Cheung, F. M., & Halpern, D. F. (2010). Women at the top: Powerful leaders define success as work + family in a culture of gender. *American Psychologist*, 65(3), 182-193. doi: 10.1037/a0017309
- Chiu, S., & Chen, H. (2005). Relationship between job characteristics and organizational citizenship behavior: The mediational role of job satisfaction. *Social Behavior and Personality*, 33(6), 523-539. doi: 10.2224/sbp.2005.33.6.523
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, *112*(1), 155-159. doi: http://dx.doi.org/10.1037/0033-2909.112.1.155
- Cooper-Hakim, A., & Viswesvaran, C. (2005). The construct of work commitment: Testing an integrative framework. *Psychological Bulletin*, *131*(2), 241-259. doi: 10.1037/0033-2909.131.2.241
- Correll, S. J., Benard, S., & Paik, I. (2007). Getting a job: Is there a motherhood penalty? *American Journal of Sociology, 112*, 1297-1338. doi: 10.1086/511799

- Coyle-Shapiro, J., & Conway, N. (2005). Exchange relationships: Examining psychological contracts and perceived organizational support. *Journal of Applied Psychology*, 90(4), 774-781. doi: 10.1037/0021-9010.90.4.774
- Coyle-Shapiro, J., Shore, L., Taylor, M. S., & Tetrick, L. (2004). The employment relationship: Examining psychological and contextual perspectives. Oxford, England: Oxford University Press.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, *31*(6), 874-900. doi: 10.1177/0149206305279602
- DeConick, J. B., & Johnson, J. T. (2009). Effects of perceived supervisor support, perceived organizational support, and organizational justice on turnover among salespeople. *Journal of Personal Selling and Sales Management, 29*(4), 333-350. doi: 10.2753/PSS0885-3134290403
- DeNavas-Walt, C., Proctor, B. D., Smith, J. C., & U. S. Census Bureau (2012). Income, poverty, and health insurance coverage in the United States: 2011 (Current Population Reports P60-243). Washington DC: Government Printing Office.
- Donaldson, S. I., & Grant-Vallone, E. J. (2002). Understanding self-report bias in organizational behavior research. *Journal of Business and Psychology*, 17(2), 245-260. doi: 10.1023/A:1019637632584
- Dupre, K. E., & Day, A. L. (2007). The effects of supportive management and job quality on the turnover intentions and health of military personnel. *Human Resource Management, 46*(2), 185-201. doi: 10.1002/hrm.20156

- Eagly, A. H. (2007). Female leadership advantage and disadvantage: Resolving the contradictions. *Psychology of Women Quarterly*, 31(1), 1-12. doi: 10.1111/j.1471-6402.2007.00326.x
- Eagly, A. H., & Chin, J. L. (2010). Diversity and leadership in a changing world. *American Psychologist*, 65(5), 216-224. doi: 10.1037/a0018957
- Eagly, A. H., Johannesen-Schmidt, M. C., & van Engen, M. L. (2003). Transformational, transactional, and laissez-faire leadership styles: A meta-analysis comparing women and men. *Psychological Bulletin, 129*(4), 569-591. doi: 10.1037/0033-2909.129.4.569.
- Eder, P., & Eisenberger, R. (2008). Perceived organizational support: Reducing the negative influence of coworker withdrawal behavior. *Journal of Management*, 34(1), 55-68. doi: 10.1177/0149206307309259
- Edwards, M. R. (2009). HR, perceived organisational support and organisational identification: An analysis after organisational formation. *Human Resource Management Journal*, *19*(1), 91-115. doi: 10.111/j.1748-8583.2008.00083.x
- Edwards, M. R., & Peccei, R. (2010). Perceived organizational support, organizational identification, and employee outcomes: Testing a simultaneous multifoci model.
 Journal of Personnel Psychology, 9(1), 17-26. doi: 10.1027/1866-5888/a000007
- Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P. D., & Rhoades, L. (2001).
 Reciprocation of perceived organizational support. *Journal of Applied Psychology*, 86(1), 42-51. doi: 10.1027//0021-9010.86.1.42

- Eisenberger, R., Cummings, J., Armeli, S., & Lynch, P. (1997). Perceived organizational support, discretionary treatment, and job satisfaction. *Journal of Applied Psychology*, 82(5), 812-820. doi: 10.1037/0021-9010.82.5.812
- Eisenberger, R., Huntington, R., Hutchinson, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71(3), 500-507. doi: 10.1037/0021-9010.71.3.500
- Eisenberger, R., Karagonlar, G., Stinglhamber, F., Neves, P., Becker, T. E., Gonzales-Morales, M. G., & Steiger-Mueller, M. (2010). Leader-member exchange and affective organizational commitment: The contribution of supervisor's organizational embodiment. *Journal of Applied Psychology*, *95*(6), 1085-1103. doi: 10.1037/a0020858
- Erdogan, B., & Enders, J. (2007). Support from the top: Supervisors' perceived organizational support as a moderator of leader-member exchange to satisfaction and performance relationships. *Journal of Applied Psychology*, *92*(2), 321-330. doi: 10.1037/0021-9010.92.2.321
- Fedor, D. B., Caldwell, S., & Herold, D. M. (2006). The effects of organizational changes on employee commitment: A multilevel investigation. *Personnel Psychology*, 59(1), 1-29. doi: 10.1111/j.1744-6570.2006.00852.x
- Frank, F. D., Finnegan, R. P., & Taylor, C. R. (2004). The race for talent: Retaining and engaging workers in the 21st century. *Human Resource Planning*, *27*(3), 12-25.

- Fried, Y., & Ferris, G. R. (1987). The validity of the job characteristics model: A review and meta-analysis. *Personnel Psychology*, 40(2), 287-322. doi: 10.1111/j.1744-6570.1987.tb00605.x
- Ganzach, Y., Pazy, A., Ohayun, Y., & Brainin, E. (2006). Social exchange and organizational commitment: Decision-making training for job choice as an alternative to the realistic job preview. *Personnel Psychology*, 55(3), 613-637. doi: 10.111/j.1744-6570.2002.tb00123.x
- Gazioglu, S., & Tansel, A. (2006). Job satisfaction in Britain: Individual and job related factors. *Applied Economics*, *38*(10), 1163-1171. doi: 0.1080/00036840500392987
- Gentry, W. A., Kuhnert, K. W., Mondore, S. P., & Page, E. E. (2007). The influence of supervisory-support climate and unemployment rate on part-time employee retention: A multilevel analysis. *Journal of Management Development, 26*(10), 1005-1022. doi: 10.1108/026217107108333432
- Graham, J. W. (2009). Missing data analysis: Making it work in the real world. *Annual Review of Psychology*, 60, 549-576. doi:

10.1146/annurev.psych.58.110405.08.5530.

- Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management, 26*(3), 463-488. doi: 10.1177/0149206300002600305
- Griffin, M. L., Hogan, N. L., Lambert, E. G., Tucker-Gail, K. A., & Baker, D. N. (2010). Job involvement, job stress, job satisfaction, and organizational commitment and

the burnout of correctional staff. *Criminal Justice and Behavior*, *37*, 239-255. doi: 10.1177/0093854809351682

- Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. Journal of Applied Psychology, 60(2), 159-170. doi: 10.1037/h0076546
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 16, 250-279. doi: 10.1016/0030-5073(76)90016-7
- Handel, M. (2005). Trends in perceived job quality, 1989 to 1998. *Work and Occupations*, *32*(1), 66-94. doi: 10.1177/0730888404271901
- Harper, E. P., Baldwin, R. G., Gansneder, B. G., & Chronister, J. L. (2001). Full-time women faculty off the tenure track: Profile and practice. *The Review of Higher Education*, 24(3), 237-257. doi: 10.1353/rhe.2001.0003
- Herrbach, O. (2006). A matter of feeling? The affective tone of organizational commitment and identification. *Journal of Organizational Behavior*, 27(5), 629-643. doi: 10.1002.job/362
- Hom, P. W., Tsui, A. S., Wu, J. B., Zhang, A. Y., Fu, P. P., & Li, L. (2009). Explaining employment relationships with social exchange and job embeddedness. *Journal of Applied Psychology*, 94(2), 277-297. doi: 10.1037/a0013453
- Hui, C., Wong, A., & Tjosvold, D. (2007). Turnover intention and performance in China: The role of positive affectivity, Chinese values, perceived organizational support, and constructive controversy. *Journal of Occupational and Organizational Psychology*, 80(4), 735-751. doi: 10.1348/096317906X171037

- Hu, B., Weng, Q. X., & Chen, Z. X. (2008). The empirical study of organizational attractiveness: Based on the angle of prospective employees. *Forecasting*, 27(1), 53-59.
- Joiner, T. A., & Bakalis, S. (2006) The antecedents of organizational commitment: The case of Australian casual academics. *International Journal of Educational Management, 20*(6), 439-452. doi: 10.1108/09513540610683694
- Johnson, R. E., & Chang, C. (2006). "I" is to continuance as "We" is to affective: The relevance of the self-concept for organizational commitment. *Journal of Organizational Behavior*, 27(5), 549-570. doi: 10.1002/job.364
- Joy, L., Carter, N. M., Wagner, H. M., & Narayanan, S. (2007). The bottom line: Corporate performance and women's representation on boards. Catalyst, 3, 619-625.
- Judge, T., Bono, J., & Locke, E. (2000). Personality and job satisfaction: The mediating role of job characteristics. *Journal of Applied Psychology*, 85(2), 237-249. doi: 10.1037/0021-9010.85.2.237
- Judge, T. A., & Kammeyer-Mueller, J. D. (2012). Job attitudes. *Annual Review of Psychology*, *63*, 341-367. doi: 10.1146/annurev-psych-120710-100511

Kacmar, K. M., Andrews, M. C., Van Rooy, D. L., Steilberg, R. C., & Cerrone, S. (2006). Sure everyone can be replaced...but at what cost? Turnover as a predictor of unit-level performance. *Academy of Management Journal, 49*(1), 133-144. doi: 10.2307/20159750

- Karsan, R. (2007). Calculating the cost of turnover. *Employee Relations Today*, *34*(1), 33-36. doi: 10.1002/ert.20139
- Karsh, B., Booske, B. C., & Sainfort, F. (2005). Job and organizational determinants of nursing home employee commitment, job satisfaction and intent to turnover. *Ergonomics*, 48(10), 1260-1281. doi: 10.1080/00140130500197195
- Kinnunen, U., Feldt, T., & Makikangas, A. (2008). Testing the effort-reward imbalance model among Finnish managers: The role of perceived organizational support. *Journal of Occupational Health Psychology*, *13*(2), 114-127. doi: 10.1037/1076-8998.13.2.114
- Ko, J., Price, J. L., & Mueller, C. W. (1997). Assessment of Meyer and Allen's threecomponent model of organizational commitment in South Korea. *Journal of Applied Psychology*, 82(6), 961-973. doi: 10.1037/0021-9010.82.6.961
- Krosnick, J. A. (1999). Survey research. *Annual Review of Psychology*, *50*, 537-567. doi: 10.1146/annurev.psych.50.1.537
- Lambert, L. S. (2011). Promised and delivered inducements and contributions: An integrated view of psychological contract appraisal. *Journal of Applied Psychology*, *96*(4), 695-712. doi: 10.1037/a0021692
- Levinson, H. (1965). Reciprocation: The relationship between man and organization. *Administrative Science Quarterly*, 9(4), 370-390. doi: 10.2307/2391032
- Loi, R., Hang-yue, N., & Foley, S. (2006). Linking employees' justice perceptions to organizational commitment and intention to leave: The mediating role of

perceived organizational support. *Journal of Occupational and Organizational Psychology*, *79*(1), 101-120. doi: 10.1348/0963117905X39657

- Long, L., L., Fang, L. L., & Ling, W. Q. (2002). Organizational career management: Measurement and its effects on employees' behavior and feelings in China. *Acta Psychology Sinica*, 24(1), 97-105.
- Maertz Jr., C. P., Griffeth, R. W., Campbell, N. S., & Allen, D. G. (2007). The effects of perceived organizational support and perceived supervisor support on employee turnover. *Journal of Organizational Behavior*, 28(8), 1059-1075. doi: 10.1002/job.472
- Mankanjee, C. R., Hartzer, Y. F., & Uys, I. L. (2006). The effect of perceived organizational support on organizational commitment of diagnostic imaging radiographers. *Radiography*, 12(2), 118-126. doi: 10.1016/j.radi.2005.04.005
- Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, *108*(2), 171-194. doi: 10.1037//0033-2909.108.2.171
- Messer, B. A. E., & White, F. A. (2006). Employees' mood, perceptions of fairness, and organizational citizenship behavior. *Journal of Business and Psychology*, 21(1), 65-82. doi: 10.1007/s10869-005-9018-x
- Meyer, J. P., & Allen, N. J. (1991). A three component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 64-98. doi: 10.1016/1053-4822(91)90011-Z

- Meyer, J. P., & Allen, N. J. (1993). Commitment to organizational occupations:
 Extension and test of a three-component conceptualization. *Journal of Applied Psychology*, 78(4), 538-551. doi: 10.1037/0021-9010.78.4.538
- Meyer, J., Becker, T., & Van Dick, R. (2006), Social identities and commitments at work: Toward an integrative model, *Journal of Organizational Behavior*, 27(5), 665-683. doi: 10.1002/job.383
- Meyer, J. P., Becker, T. E., & Vandenberghe, C. (2004). Employee commitment and motivation: A conceptual analysis and integrative model. *Journal of Applied Psychology*, 89(6), 991-1007. doi: 10.1037///0021-9010.89.6.991
- Meyer, J. P., & Herscovitch, L. (2001). Commitment in the workplace: Toward a general model. *Human Resource Management Review*, 11(3), 299-326. doi: 10.1016/S1053-4822(00)00053-X
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational behavior*, *61*(1), 20-52. doi: 10.1006/jvbe.2001.1842
- Mitchell, M. S., & Ambrose, M. L. (2007). Abusive supervision and workplace deviance and the moderating effects of negative reciprocity beliefs. *Journal of Applied Psychology*, 92(4), 1159-1168. doi: 10.1037/0021-9010.92.4.1159
- Morrison, D., Cordery, J., Girardi, A., & Payne, R. (2005). Job design, opportunities for skill utilization, and intrinsic job satisfaction. *European Journal of Work and Organizational Psychology*, 14(1), 59-79. doi: 10.1080/13594320444000272

Munoz-Bullon, F. (2010). Gender-compensation differences among high-level executives in the United States. *Industrial Relations*, 49(3), 346-370. doi: 10.1111/j.1468-232X.2010.00604.x

National Science Foundation, National Center for Science and Engineering Statistics.
 (2015). Science and Engineering Degrees: 1966–2012. Detailed Statistical Tables
 NSF 15-326. Arlington, VA.

Retrieved from: http://www.nsf.gov/statistics/2015/nsf15326

- Newmark, D., & Gardecki, R. (1998). Women helping women? Role model and mentoring effects on female PhD students in economics. *Journal of Human Resources*, 33(1), 220-246. doi: 10.3386/w5733
- Ng, T. W. H., Butts, M. M., Vandenberg, R. J., Dejoy, D. M., & Wilson, M. G. (2006). Effects of management communication, opportunity for learning, and work schedule flexibility on organizational commitment. *Journal of Vocational Behavior, 68*(3), 474-489. doi: 10.1016/j.jvb.2005.10.004
- Ng, T. W. H., & Sorenson, K. L. (2008). Toward a further understanding of the relationships between perceptions of support and work attitudes: A meta-analysis. *Group and Organization Management*, 33(3), 243-268. doi: 10.1177/1059601107313307
- Obeng, K., & Ugboro, I. (2003). Organizational commitment among public transit employees: An assessment study. *Journal of the Transportation Research Forum*, *57*(2), 83-98. doi: 1046-1469

- Oldham, G. R., Hackman, J. R., & Pearce, J. L. (1976). Conditions under which employees positively respond to enriched work. *Journal of Applied Psychology*, 61(4) 395-403. doi: 10.1037/0021-9010.61.4.395
- O'Reilly, C. A., & Pfeffer, J. (2000). Unlocking the hidden value in organizations. *Employment Relations Today*, 27(2), 63-80. doi: 10.1002/1520-6459(200022)27:2
- Panaccio, A., & Vandenberghe, C. (2011). The relationships of role clarity and organization-based self-esteem to commitment to supervisors and organizations and turnover intentions. *Journal of Applied Psychology*, *41*(6), 1455-1485. doi: 10.1111/j.1559-1816.2011.00764.x
- Parnell, J. A., & Crandall, W. (2003). Propensity for participative decision-making, job satisfaction, organizational commitment, organizational citizenship behavior, and intentions to leave among Egyptian managers. *Multinational Business Review*, *11*(1), 45-65. doi: 10.1108/1525383X200300003
- Perna, L. W. (2001). Sex differences in faculty salaries: A cohort analysis. *The Review of Higher Education*, 24(3), 283-307. doi: 10.1353/rhe.2001.0006
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000).
 Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, 26, 513-563. doi: 10.1177/014920630002600307
- Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59(5), 603-609. doi: 10.1037/h0037335

- Porter, S. R., Whitcomb, M. E., & Weitzer, W. H. (2004) Multiple surveys of students and survey fatigue. *New Directions for Institutional Research*, 2004(121), 63-73. doi: 10.1002/ir.101
- Rask, K. N., & Bailey, E. M. (2002). Are faculty role models? Evidence from major choice in an undergraduate institution. *Journal of Economic Education*, 33(2), 99-124. doi: 10.1080/00220480209596461
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87(4), 698-714. doi: 10.1037//0021-901087.4.698
- Rhoades, L., Eisenberger, R., & Armeli, S. (2001). Affective commitment to the organization: The contribution of perceived organizational support. *Journal of Applied Psychology*, 86(5), 825-836. doi: 10.1037//0021-9010.86.5.825
- Rioux, S. M., & Penner, L. A. (2001). The causes of organizational citizenship behavior:
 A motivational analysis. *Journal of Psychology*, *86*, 1306-1314. doi:
 10.1037/0021-9010.86.6.1306
- Robst, J., VanGlider, J., & Polachek, S. (2003). Perceptions of female faculty treatment in higher education: Which institutions treat women more fairly? *Economics of Education Review*, 22(1), 59-67. doi: 10.1016/0272-7757(01)00056-5

Rousseau, D. M. (1998). Why workers still identify with organizations. *Journal of Organizational Behavior, 19*(3), 217-233. doi: 10.1002/(SICI)1099-1379(199805)19:3

- Rousseau, D. M. (2001). Schema, promise, and mutuality: The building blocks of the psychological contract. *Journal of Occupational Psychology*, 74(4), 511-541. doi: 10.1348/096317901167505
- Rousseau, D. M. (2004). Psychological contracts in the workplace: Understanding the ties that motivate. *Academy of Management Executives*, 18(1), 120-127. doi: 10.5465/AME.2004.12689213
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, *21*(7), 600-619. doi: 10.1108/02683940610690169
- Samble, J. N. (2008). Female Faculty: Challenges and choices in the United States and beyond. *New Directions for Higher Education*, 143, 55-62. doi: 10.1002/he.313
- Schalk, R., Campbell, J. W., & Freese, C. (1998). Change and employee behavior. Leadership and Organizational Development Journal, 19, 157-163. doi: 10.1108/01437739810210202
- Sanchez-Hucles, J. V., & Davis, D. D. (2010). Women and women of color in leadership:
 Complexity, identity, and intersectionality. *American Psychologist*, 65(3), 171181. doi: 10.1037/a0017459
- Shanock, L. R., & Eisenberger, R. (2006). When supervisors feel supported:
 Relationships with subordinates perceived supervisor support, perceived organizational support, and performance. *Journal of Applied Psychology*, *91*(3), 689-695. doi: 10.1037/0021-9010.91.3.689

- Shore, T. H., Bommer, W H., & Shore, L. M. (2008). An integrative model of managerial perceptions of employee commitment: Antecedents and influences on employee treatment. *Journal of Organizational Behavior*, 29(5), 635-655. doi: 10.1002/job.516
- Shore, L. M., & Tetrick, L. E. (1991). A construct validity study of the survey of perceived organizational support. *Journal of Applied Psychology*, *76*(5), 637-643. doi: 10.1037/0021-9010.76.5.637
- Shore, L. M., & Wayne, S. J. (1993). Commitment and employee behavior: Comparison of affective commitment and continuance commitment with perceived organizational support. *Journal of Applied Psychology*, 78(5), 774-780. doi: 10.1037/0021-9010.78.5.774
- Somers, M. J. (2010). Patterns of attachment to organization: Commitment profiles and work outcomes. *Journal of Occupational and Organizational Psychology*, 83(2), 443-453. doi: 10.1348/096317909X424060
- Shriver, M., & Center for American Progress. (2009). The Shriver report: A woman's nation changes everything. Retrieved from: http://shriverreport.org/specialreport/a-womans-nation-changes-everything/
- Spector, P. E. (1985). Measurement of human service staff satisfaction: Development of the job satisfaction survey. *American Journal of Community Psychology*, *13*(6), 693-713. doi: 10.1007/BF00929796

- Suazo, M. M., Martinez, P. G., & Sandoval, R. (2009). Creating psychological and legal contracts through human resource practices: A signaling theory perspective. *Human Resource Management Review*, 19(2), 154-166. doi: 10.1016/j.hrmr.2008.11.002
- Tansky, J. W., & Cohen, D. J. (2001). The relationship between organizational support, employee development, and organizational commitment: An empirical study.
 Human Resource Development Quarterly, 12(3), 285-300. doi: 10.1002/hrdq.15
- Thomas, D. C., Au, K., & Ravlin, E. C. (2003). Cultural variation and the psychological contract. *Journal of Organizational Behavior*, 24(5), 451-471. doi: 10.1002/job.209
- Treverton, G. F., & Bikson, T. K. (2003). New challenges for the 21st century (Issues paper 233). Santa Monica, CA: RAND. Retrieved from http://www.rand.org/pubs/issue_papers/IP233/IP233.pdf.
- Van Dick, R., Becker, T. E., & Meyer, J. P. (2006). Commitment and identification: Forms, foci, and future. *Journal of Organizational Behavior*, 27(5), 545-548. doi: 10.1002/job.384
- Van Dick, R., Hirst, G., Grojean, M. W., & Wieseke, J. (2007). Relationships between leader and follower organizational identification and implications for follower attitudes and behavior. *Journal of Occupational and Organizational Psychology*, 80(1), 133-150. doi: 10.10348/096317905X71831

- Van Knippenberg, D., Van Dick, R., & Tavares, S. (2007). Social identity and social exchange: Identification, support, and withdrawal from the job. *Journal of Applied Social Psychology*, 37(3), 457-477. doi: 10.111/j.1559-1816.2007.00168.x
- Voydanoff, P. (1980). Perceived job characteristics and job satisfaction among men and women. *Psychology of Women Quarterly*, 5(2), 177-186. doi: 10.1111/j.1471-6402.1980.tb00954.x
- Villanueva, D., & Djurkovic, N. (2009). Occupational stress and intention to leave among employees in small and medium enterprises. *International Journal of Stress Management*, 16(2), 124-137. doi: 10.1037/a0015710
- Watrous, K. M, Huffman, A. H., & Pritchard, R. D. (2006). When coworkers and mangers quit: The effects of turnover and shared values on performance. *Journal* of Business and Psychology, 21(1), 103-126. doi: 10.1007/s10869-005-9021-2.
- Watt, J. D., & Hargis, M. B. (2010). Boredom proneness: Its relationship with subjective underemployment, perceived organizational support, and job performance. *Journal of Business Psychology*, 25(1), 163-174. doi: 10.1007/s10869-009-9138-9
- Webster, J. R., & Adams, G. A. (2010). Organizational support and contract fulfillment as moderators of the relationship between preferred work status and performance. *Journal of Business Psychology*, 25(1), 131-138. doi: 10.1007/s10869-009-9135-z
- Weng, Q., McElroy, J. C., Morrow, P. C., & Liu, R. (2010). The relationship between career growth and organizational commitment. *Journal of Vocational Behavior*, 77(3), 391-400. doi: 10.1016/j.jvb.2010.05.003

- Wheeler, A. R., Gallagher, V. C., Brower, R. L., & Sablynski, C. J. (2007). When-person organization (mis)fit and (dis)satisfaction lead to turnover: The moderating role of perceived job mobility. *Journal of Managerial Psychology*, 22(2), 203-219. doi: 10.1108/02683940710726447
- Wiener, Y. (1982). Commitment in organizations: A normative view. Academy of Management Review, 7, 418-428. doi: 10.5465/AMR.1982.4285349
- Winkler, J. A. (2000). Faculty reappointment, tenure, and promotion: Barriers for women. *Professional Geographer*, 52(4), 737-750. doi: 10.1111/0033-0124.00262
- Woolley, A., & Malone, T. (2011). What makes a team smarter? More women. *Harvard Business Review*, 32-33.
- Wright, B.E., & Kim, S. (2004). Participation's influence on job satisfaction: The importance of job characteristics. *Review of Public Personnel Administration*, 24(1). doi: 10.1177/0734371X03259860
- Yoon, J., & Thye, S. R. (2002). A dual process model of organizational commitment: Job satisfaction and organizational support. *Work and Occupations*, 29(1), 97-125.
 doi: 10.1177/0730888402029001005
- Yun, S., Takeuchi, R., & Liu, W. (2007). Employee self-enhancement motives and job performance behaviors: Investigating the moderating effects of employee role ambiguity and managerial perceptions of employee commitment. *Journal of Applied Psychology*, 92(3), 745-756. doi: 10.1037/0021-9010.92.3.745

- Zagenczyk, T. J., Gibney, R., Few, W. T., & Scott, K. L. (2011). Psychological contracts and organizational identification: The mediating effect of perceived organizational support. *Journal of Labor Research, 32*, 254-281. doi: 10.1007/s12122-011-9111-z
- Zhang, L. (2008). Gender and racial gaps in earnings among recent college graduates. *The Review of Higher Education, 32*(1), 51-72. doi: 10.1353/rhe.0.0035

Appendix A: Participant Letter of Invitation to the Study

Greetings,

You are invited to take part in a research study of the effect of training opportunities that enhance an individuals career on their satisfaction with their job, overall organizational commitment, and perceptions concerning the degree to which their educational institution supports them. The researcher is inviting all adults over the age of 18 who are currently teaching at a four-year postsecondary institution to participate in the study. Please only participate in the study once, regardless of the number of institutions at which you teach. The study will remain open for a total of 30 days. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part. This study is being conducted by a researcher named Laura Bryant, who is a doctoral student at Walden University,

Background Information: The purpose of this study is to examine the effects that careerenhancing training opportunities can have on the perceived organizational support, organizational commitment, and job satisfaction of faculty members.

Procedures:

If you agree to be in this study, you will be asked to:

Answer questions regarding personal demographic information (age, gender, number of years teaching) which should take approximately 3 minutes

Answer questions about your satisfaction with your current job (Approximate 5 minutes) Answer questions about your commitment to your organization (approximately 5 minutes) Answers questions about the degree to which you feel your educational institutions support you (approximately 2 minutes)

Voluntary Nature of the Study: This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one at Walden University will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later. You may stop at any time.

Risks and Benefits of Being in the Study: Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as stress and becoming upset. Being in this study should not pose risk to your safety or wellbeing.

Payment: If you agree to participate in this study, please be aware that there will be no gifts (financial or otherwise) or payments to you as a participant.

Privacy: Any information you provide will be kept confidential. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. Data will be kept secure by being stored on the Survey Monkey website (a secure website for data collection) and also on the researchers personal computer which is password protected. Data will be kept for a period of at least 5 years, as required by the university.

Contacts and Questions: You may ask any questions you have now. Or if you have questions later, you may contact the researcher via email at "XXX@waldenu.edu". If you want to talk

privately about your rights as a participant, you can email Dr XXXX at "irb@waldenu.edu". XXXX is the Walden University representative who can discuss this with you. You may request a copy of the results from the researcher if you would like. Walden University's approval number for this study is 07-16-14-0098096 and it expires on July 15, 2015.Please print or save this consent form for your records.

Statement of Consent: I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By clicking the link below, I understand that I am agreeing to the terms described above.

https://www.surveymonkey.com/s/QQY2VYP

Appendix B: Demographics Survey

- 1. What is your age? _____
- 2. What is your gender? Male____ Female____ Other_____
- 3. What is your race? African-American
 Caucasian
 Asian

 Native American
 Hispanic
 Other
- 4. What is your tenure status? Tenured_____ Non Tenured_____
- 5. What is your faculty rank? Full Professor_____ Associate Professor_____

 Assistant Professor_____ Instructor_____ Lecturer_____

 Adjunct_____ Other_____ Rank not applicable______
- 6. What your highest completed degree? High School Diploma _____ Bachelor's
 Degree _____ Master's Degree _____ Educational Specialist degree _____
 Doctorate degree Other

7. How long has it been since you received your highest degree?

- 8. In what field of study was your highest and most recent degree?
- 9. In what department are you currently teaching?
- 10. How many years of teaching experience at the postsecondary level do you have (include all institutions)? ____0 to 2 years___3 to 5 years ___6 to 8 years ___Over 8 years
- 11. How long have you been working for your current organization? __0 to 2 years3 to 5 years 6 to 8 years Over 8 years
- 12. "Career-Enhancing Training Opportunities" as used in this study refers to educational opportunities that would not only enhance an employee's career in

their current organization, but could also provide training that would be relevant to overall personal development. Examples include: the organization paying for you to attend professional conferences, attending collegiate classes during working hours and being paid your regular wages without being charged leave, the organization paying completely or partially for college courses for employees, and training employees in new procedures and technologies in their field. This definition does not refer to training that is mandatory for compliance with laws or company regulations (i.e. sexual harassment training, information assurance awareness training, timecard entry, fire safety, etc.). Based on this definition what approximate number of career-enhancing training opportunities have you been offered by your institution in the past 365 days?

13. What is your approximate annual salary from your teaching institution?

Appendix C: Permission to Use the Survey of Perceived Organizational Support

From: Robert Eisenberger <<u>XXX@udel.edu</u>> Date: June 24, 2013, 5:13:27 PM CDT To: "Bryant, Laura P." <<u>XXX@pensacolastate.edu</u>> Subject: Re: SPOS and dissertations

Hi Laura, I am happy to give you permission to use the SPOS. Best of luck with your research. Cordially, Bob ---Robert Eisenberger Professor of Psychology College of Liberal Arts & Soc. Sciences Professor of Management C. T. Bauer College of Business University of Houston XXX@uh.edu

On Mon, Jun 24, 2013 at 12:16 PM, Bryant, Laura P. <<u>XXX@pensacolastate.edu</u>> wrote:

Appendix D: 8-Item Survey of Perceived Organizational Support

Listed below and on the next several pages are statements that represent possible opinions that YOU may have about working at _____. Please indicate the degree of your agreement or disagreement with each statement by filling in the circle on your answer sheet that best represents your point of view about _____. Please choose from the following answers:

0	1	2	3	4	5	6
Strongly Disagree	Moderatel y Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Moderatel y Agree	Strongly Agree

1. The organization values my contribution to its well-being.

3. The organization fails to appreciate any extra effort from me. (R)

7. The organization would ignore any complaint from me. (R)

9. The organization really cares about my well-being.

17. Even if I did the best job possible, the organization would fail to notice. (R)

21. The organization cares about my general satisfaction at work.

23. The organization shows very little concern for me. (R)

27. The organization takes pride in my accomplishments at work.

© University of Delaware, 1984
Appendix E: Permission to Use the Job Satisfaction Survey

RE: Dissertations and the Job Satisfaction Survey

Spector, Paul [XXX@usf.edu] Sent:Sunday, June 16, 2013 5:41 PM To: Bryant, Laura P.

Dear Laura:

You have my permission to use the JSS in your research. You can find copies of the scale in the original English and several other languages, as well as details about the scale's development and norms in the Scales section of my website <u>http://shell.cas.usf.edu/~spector</u>. I allow free use for noncommercial research and teaching purposes in return for sharing of results. This includes student theses and dissertations, as well as other student research projects. Copies of the scale can be reproduced in a thesis or dissertation as long as the copyright notice is included, "Copyright Paul E. Spector 1994, All rights reserved." Results can be shared by providing an e-copy of a published or unpublished research report (e.g., a dissertation). You also have permission to translate the JSS into another language under the same conditions in addition to sharing a copy of the translation with me. Be sure to include the copyright statement, as well as credit the person who did the translation with the year.

Thank you for your interest in the JSS, and good luck with your research.

Best,

Paul Spector, Professor Department of Psychology PCD 4118 University of South Florida Tampa, FL 33620 XXX XXX@usf.edu http://shell.cas.usf.edu/~spector ----Original Message-----From: Bryant, Laura P. [mailto:XXX@pensacolastate.edu] Sent: Sunday, June 16, 2013 5:46 PM To: Spector, Paul Subject: Dissertations and the Job Satisfaction Survey

Appendix F: Job	Satisfaction	Survey
-----------------	--------------	--------

	JOB SATISFACTION SURVEY Paul E. Spector Department of Psychology University of South Florida	
	Copyright Paul E. Spector 1994, All rights reserved.	
	EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT.	Disagree very much Disagree moderatel Disagree slightly Agree slightly Agree wery much
1	I feel I am being paid a fair amount for the work I do.	1 2 3 4 5 6
2	There is really too little chance for promotion on my job.	1 2 3 4 5 6
3	My supervisor is quite competent in doing his/her job.	1 2 3 4 5 6
4	I am not satisfied with the benefits I receive.	1 2 3 4 5 6
5	When I do a good job, I receive the recognition for it that I should receive.	1 2 3 4 5 6
6	Many of our rules and procedures make doing a good job difficult.	1 2 3 4 5 6
7	I like the people I work with.	1 2 3 4 5 6
8	I sometimes feel my job is meaningless.	1 2 3 4 5 6
9	Communications seem good within this organization.	1 2 3 4 5 6
10	Raises are too few and far between.	1 2 3 4 5 6
11	Those who do well on the job stand a fair chance of being promoted.	1 2 3 4 5 6
12	My supervisor is unfair to me.	1 2 3 4 5 6
13	The benefits we receive are as good as most other organizations offer.	1 2 3 4 5 6
14	I do not feel that the work I do is appreciated.	1 2 3 4 5 6
15	My efforts to do a good job are seldom blocked by red tape.	1 2 3 4 5 6
16	I find I have to work harder at my job because of the incompetence of people I work with.	1 2 3 4 5 6
17	I like doing the things I do at work.	1 2 3 4 5 6
18	The goals of this organization are not clear to me.	1 2 3 4 5 6

	PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT. Copyright Paul E. Spector 1994, All rights reserved.	Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much	
19	I feel unappreciated by the organization when I think about what they pay me.	1	2	3		4	5	(
20	People get ahead as fast here as they do in other places.	1	2	3	, .	4	5	e
21	My supervisor shows too little interest in the feelings of subordinates.	1	2	3	; .	4	5	(
22	The benefit package we have is equitable.	1	2	3	; .	4	5	(
23	There are few rewards for those who work here.	1	2	3	i .	4	5	(
24	I have too much to do at work.	1	2	3	; .	4	5	(
25	I enjoy my coworkers.	1	2	3	; .	4	5	(
26	I often feel that I do not know what is going on with the organization.	1	2	3	i .	4	5	(
27	I feel a sense of pride in doing my job.	1	2	3	j .	4	5	(
28	I feel satisfied with my chances for salary increases.	1	2	3	j .	4	5	(
29	There are benefits we do not have which we should have.	1	2	3	, .	4	5	(
30	I like my supervisor.	1	2	3	j .	4	5	(
31	I have too much paperwork.	1	2	3	, .	4	5	(
32	I don't feel my efforts are rewarded the way they should be.	1	2	3	, .	4	5	(
33	I am satisfied with my chances for promotion.	1	2	3	, .	4	5	(
34	There is too much bickering and fighting at work.	1	2	3	, .	4	5	(
35	My job is enjoyable.	1	2	3	, ,	4	5	(
36	Work assignments are not fully explained.	1	2	3	; .	4	5	e

Appendix G: Permission to Use the TCM Organizational Commitment Survey

TCM Employee Commitment Survey | Academic Download XXX@uwo.ca <XXX@uwo.ca > Fri, May 16, 2014 at 4:09 PM Reply-To: XXXX@uwo.ca To: XXXX@waldenu.edu TCM Employee Commitment Survey | Academic Download Name: Laura Bryant Email: XXXX@waldenu.edu To download a copy of the TCM Employee Commitment Survey - Academic Package, please click the following link: http://employeecommitment.com/TCM-Employee-Commitment-Survey-Academic-Package-2004.pdf

Information regarding use of the survey from http://www.employeecommitment.com: Academic Package

The Academic Package includes the survey, instructions for using, scoring, and interpreting the survey results as well as additional sources for more information about the commitment scales and employee commitment. The license provides proper permission notice for use of the scales for academic purposes.

The license for the Academic Package is limited to the use of the TCM Employee Commitment Survey in a single research project. Subsequent uses of the Survey require a renewal license. The license agreement for the Academic Package stipulates that the scales will be used for academic purposes only, and that the user will not charge clients for administering/interpreting the scales or use the scales as part of a proprietary organizational survey.



Appendix H: Boxplots, Histograms, P-P plots, and Scatterplots

Figure H1. Boxplot for predictor and outcome variables showing outliers



Figure H2. Boxplot for predictor and outcome variables without outliers



Figure H3. Histogram for POS.



Normal P-P Plot of Regression Standardized Residual

Figure H4. Normal P-P plot for CETO predicting POS.



Scatterplot

Figure H5. Residuals scatterplot for CETO predicting POS.



Figure H6. Histogram for JS.



Normal P-P Plot of Regression Standardized Residual Dependent Variable: Job Satisfaction Overall Score

Figure H7. Normal P-P plot for CETO predicting JS.



Figure H8. Residuals scatterplot for CETO predicting JS.



Figure H9. Histogram for ACS.



Normal P-P Plot of Regression Standardized Residual

Figure H10. Normal P-P plot for CETO predicting AC.



Figure H11. Residuals scatterplot for CETO predicting AC.



Figure H12. Histogram of CC.



Normal P-P Plot of Regression Standardized Residual

Figure H13. Normal P-P plot for CETO predicting CC.



Figure H14. Residuals scatterplot for CETO predicting CC.



Figure H15. Histogram for NC.



Normal P-P Plot of Regression Standardized Residual

Figure H16. Normal P-P plot for CETO predicting NC.



Figure H17. Residuals scatterplot for CETO predicting NC.