THE EFFECTS OF JOB EMBEDDEDNESS ON RETENTION OF

EMPLOYEES IN PUBLIC HIGHER EDUCATION

by

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Abstract

Employee retention is emerging as a top priority for many organizations nationwide (Ratna & Chawla, 2012). To ensure viability, institutions of higher education need to capitalize on the talent and energy possessed by their employees. Employees are an organization's greatest resource (Byerly, 2012). Additionally, employees hold valuable knowledge about the organization, its clients, and systems (Ratna & Chawla, 2012). In some cases, these employees possess rare skills, expertise, and knowledge. These skills, expertise, and knowledge allow institutions to distinguish themselves, as well as, achieve their mission. When employees leave, they take valuable knowledge and institutional memory with them (Ratna & Chawla, 2012). For sustainability, institutions will need to understand the reasons employees remain with their employers.

The purpose of this study was to investigate the role job embeddedness plays in the retention of public employees of higher education, with emphasis on information technology professionals. The job embeddedness model has been found to be a better predictor of intentions to stay among employees in different industries (Reitz & Anderson, 2011). Additionally, this study aimed to determine whether the intentions to stay or leave differed among information technology professionals and non-information technology professionals based on their levels of job embeddedness.

The results confirmed the predictive validity of the job embeddedness construct on the retention of staff employees in public higher education. The results showed that job embeddedness explained 32% of the variance in the intentions to stay for staff employees in public higher education, with fit of organization and job and sacrifice to organization being the strongest predictors. The qualitative results provided the reasons staff employees continue working for their public universities, namely the alignment of the organizational mission and coworker relations.

Additionally, the results contributed to the job embeddedness research by identifying specific dimensions that influence the job embeddedness of IT professionals. It expands the job embeddedness research to IT professionals in public higher education. Lastly, the present study identified factors that distinguish IT professionals from employees in other professions. These factors related to their job fit and their willingness to seek other employment with better professional growth opportunities.

Keywords: turnover, retention, job embeddedness, information technology professionals, public higher education

iv

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v

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I embarked on this journey for a plethora of reasons. Over the past three decades working in IT for private and public organizations, I observed patterns among my coworkers. I wanted to know why these patterns occurred. This intellectual curiosity and pursuit of knowledge drove my dissertation inquiry and my educational journey.

I would like to express my deepest appreciation to my family, friends, and colleagues. Thanks to my children and grandchildren for their constant support and inspiration. Thanks to my parents for their unwavering faith in me. Thanks to my church family for their emotional and spiritual support. Thanks to my colleagues, who shared my experiences and provided valuable advice, as well as encouragement. This journey would not have been possible without them.

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This educational pursuit is the culmination of a childhood dream. I watched my father pursue his education throughout my childhood. I made a commitment at that time to follow in his footsteps. I am grateful for his example

and inspiration. I dedicate this dissertation to my father, Dr. Sherman, and my mother.

TABLE OF CONTENTS

ix

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1: INTRODUCTION

As institutions of higher education grapple with challenges to be more accountable, to increase completion rates, to provide greater access, and to reduce remediation rates, these institutions often seek specific technologies to facilitate change, to inform decisions, and to institute improvements. The ability of these institutions to capitalize upon these technologies depends on the effective use of their information technology professionals (Agarwal & Ferratt, 2002). As such, information technology (IT) professionals provide a critical role in the furtherance of an institution's technology strategies (Calisir, Gumussoy, & Iskin, 2011). The productivity that these individuals can provide is incumbent upon the effective use of their talent and energy.

The ability for an organization to capitalize on the talent and energy of these IT professionals depends on the organization and community in which these individuals interact (Mitchell, Holtom, Lee, Sablynski, & Erez, 2001). Unsatisfactory interactions can result in the individuals withdrawing, resisting, rebelling, or quitting, which can impede an organization's progress on technological improvements or other institutional goal (Bolman & Deal, 2008). Furthermore, the loss of key information technology profession can jeopardize an organization's mission, as well (Calisir et al., 2011; Chang, Chen, Klein, & Jiang, 2011). As such, the retention of these key employees is critical to the furtherance of an organization's technological strategies. In order to devise strategies for retaining these IT professionals, it is important to understand why employees stay or quit. The job embeddedness model is a key predictor of employees' intentions to remain with their organization (Mitchell et al., 2001). This theoretical construct can help organizations gain an understanding of why employees remain with their

organizations and why others leave (Mitchell et al., 2001). In understanding why employees stay with their organization, organizations can design effective recruitment and retention policies that can reduce costly turnover and increase employee productivity.

Purpose of the Study

Turnover is a major concern for many organizations. No organization is impervious to turnover's pervasive nature (Mobley, 1982). In 2012, the annual rate of "quits" for the nation was 18.8%, which equates to nearly 1 in 5 employees (Hathaway, 2013). For some industries, this rate was as high as 39.7% as in the accommodations and food service industry (Hathaway, 2013). For state institutions, the quit rate was 7.4%, which is substantially lower than the national rate (Hathaway, 2013). Turnover is costly and disruptive (Price, 1977).

The negative consequences of turnover can jeopardize organizational performance (Jacobs, 2011). For public institutions of higher education, dealing with turnover can be challenging given the unionization and regulations governing employee relations (Dewitt, 2002). The ability to devise recruitment and retention strategies requires greater insights into the elements that embed employees to their organizations. For the 81.2% that remained, these employees chose to say for one or more reasons. The elements that embed them in their organization and community might have explained these reasons. As such, the purpose of this study is to investigate the role job embeddedness plays in the intention to stay or leave among employees of higher education decisions, with emphasis on information technology professionals. The job embeddedness model has been found to be a better predictor of intentions to stay among employees in different industries (Reitz & Anderson, 2011). Additionally, this study aims to determine whether the intentions to stay or leave differ among information technology

professionals and non-information technology professionals based on their levels
of job embeddedness.

Background

Organizations face numerous challenges in managing turnover among their
employees (Jacobs, 2011) and especially their information technology
professionals. Organizations must develop strategies for addressing turnover to
avoid shortages of critical labor (Jacobs, 2011). These challenges arise from the
nature of turnover, associated costs of turnover, human resource practices,
individual characteristics of the information technology professionals, and the
supply and demand for qualified workers.

Nature of Turnover

Turnover affects all organizations, whether public or private (Mobley,
1982). Moreover, this phenomenon is not localized to any one country. It affects
the United States and most industrialized countries (Mobley, 1982). Regardless of
the economic climate, turnover can transpire. Turnover has been noted during
normal economic times, as well as, during economic downturns, such as
depressions and recessions, (Mobley, 1982). However, turnover in the public
sector, and more importantly in higher education, can be especially challenging
(Dewitt, 2002). Turnover is exacerbated when it involves employees who are
highly skilled workers (Korunka, Hoonakker, & Carayon, 2008).

Turnover Costs

For organizations, turnover can be costly and disruptive (Abii, Ogula, &
Rose, 2013; Dewitt, 2002; Mobley, 1982). The true cost of turnover of
information technology professionals is unknown. To date, a nation-wide survey
has not been conducted regarding turnover costs (Dewitt, 2002). Estimating the
replacement position costs vary, but the most conservative estimate is one-fifth of

the employee's annual salary (Boushey & Glynn, 2012). The general rule for estimating turnover cost is one half of the employee's annual salary (Dewitt, 2002). However, the estimates for talented information technology professional could rise upward to as much as twice their annual salaries (Calisir et al., 2011).

According to Dewitt (2002), the employee turnover process consists of three phases: "separation, acquisition, and knowledge transfer and training" (p. 4). When employees leave, organizations incur direct and indirect costs during each of these phases (Dewitt, 2002). Direct costs refer to expenses that associate specifically with replacing employees. Indirect costs are those expenses that are not readily identifiable or quantifiable (Boushey & Glynn, 2012; Dewitt, 2002). Although indirect costs are subjective in nature and vary from institution to institution, the financial calculation of these costs are worthy of consideration (Dewitt, 2002).

Separation costs are the direct and indirect expenses associated with the employee leaving the organization. The direct expenses include payouts for accrued vacation and earned compensatory time-off. Additionally, contract buy-outs and staffing costs for legal and HR personnel are attributable to these direct expenses. Indirect costs can consist of the loss of efficiency prior to the employee leaving, costs associated with the position remaining unfilled, and the loss of efficiency during the time another employee acquires the knowledge to fill-in for the employee, who separated. Korunka et al. (2008) stated that turnover resulted in hidden costs. These hidden costs derived from the organizations' difficulty in completing existing projects, due to the loss of talent and the disruption of existing teams (Korunka et al., 2008).

Acquisition cost involves the expenses associated with "recruitment, selection, and placement" of new employees (Dewitt, 2002, p. 4). The direct costs

associated with acquisition involve expenses for recruitment, selection, and placement. In recruitment, organizations incur direct costs for advertising the vacant position, retaining search firms, or contracting temporary labor (Boushey & Glynn, 2012). Selection costs can include travel expenses for bringing applicants in for interviews, background verifications, drug testing, employment testing, and screening applicants (Boushey & Glynn, 2012). Placement costs can include expenses for relocation or recruiting bonuses (Dewitt, 2002). The indirect costs associated with acquisition primarily come from the loss of productivity for the employees involved with the recruitment and search process (Dewitt, 2002). These activities can include participating on search committees, scheduling interview appointments, and making photocopies of documents needed during the search process. If the organization decides to hire within to fill a vacant position, the organization can incur costs associated with the cost of promotion or from transferring an employee from one department to another (Dewitt, 2002).

In addition to separation and acquisition costs, organization incur costs associated with knowledge transfer and training. To ensure successful onboarding of a new employee, the organization will need to conduct an orientation. In functional areas where organization-specific knowledge is required, the new employees will need to attend formal training or certification training. Attendance at off-premises training includes expenses for travel, meals, and lodging, as well as, the cost for the training course itself. Despite the experience level of the new employee, the employee will need on-the-job training to learn about the tools and processes used by the hiring organization (Dewitt, 2002).

The indirect costs come from a number of factors. The organization loses productivity from employees, who are involved with the on-the-job training, as well as, incur costs for the trainer's time (Dewitt, 2002). Additionally, the

organization can lose productivity and reduced quality from the new employee, while the employee ramps up (Boushey & Glynn, 2012). According to Dewitt (2002), a new employee may take up to three months to "reach a basic level of competency in the new organization" (p. 4). Another indirect cost is the loss of institutional knowledge (Boushey & Glynn, 2012). When an employee leaves, the employees take with them any knowledge gained in their job and about their organization. The loss of this knowledge can be devastating in areas where legacy systems are in use and little documentation exists (Dewitt, 2002). Figure 1 illustrates the composition of position replacement costs, including direct and indirect costs.

Human Resource Practices

For higher education, the recruitment and retention of information technology professionals is a constant challenge dating as far back as the 1990s (EDUCAUSE, 2000). A number of factors contribute to this challenge with the recruitment and retention of these individuals in higher education. First, higher education institution compete with the private sector for talented and experience information technology professionals (Coombs, 2009). In the past, higher education institutions relied on quality of work life factors, such as working in an academic setting to offset the differentials in salaries offered by private industry (Dewitt, 2002). However, the effects of quality of work life are diminishing in light of the widening gap in salaries being offered (Dewitt, 2002). At the same time, public institutions have difficulty offering competitive salaries and benefit packages that would attract or retain these individuals due to rigid state and institutional salary guidelines (Dewitt, 2002).
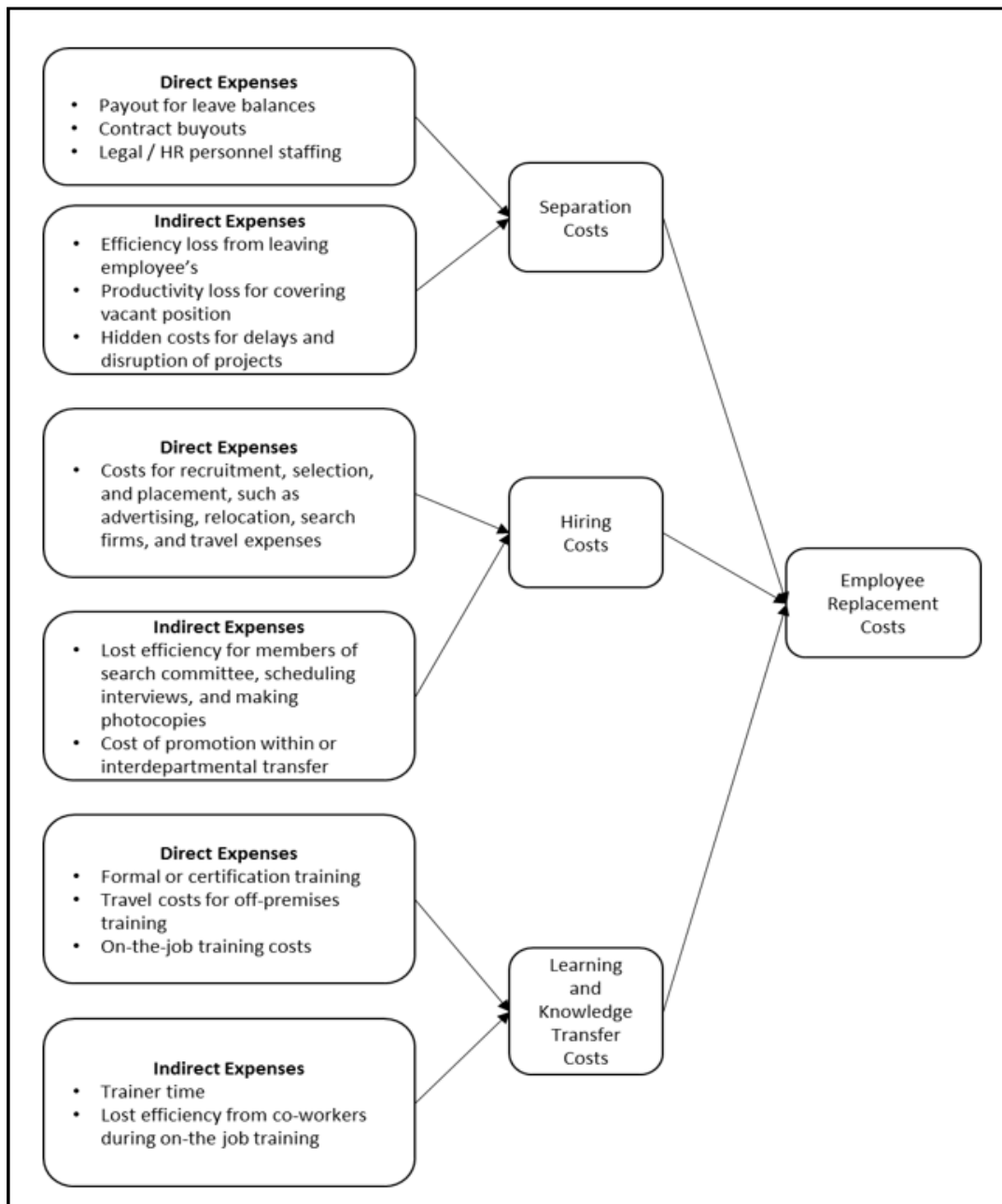
Figure 1. The cost of filling a vacant position.
Note: The first column of rectangles represents the sources of costs associated with replacing an employee, who quits voluntarily. The lines represent the types of turnover costs, such as direct or indirect. The second column of rectangles represents the turnover cost categories. The last rectangle in the third column is the total cost associated with replacing an employee. Adapted from (Dewitt, 2002)

Second, collective bargaining agreements and public service system constrains higher education Human Resources (HR) departments from crafting effective retention and recruitment strategies for new and existing employees in competitive labor markets (Coombs, 2009; Dewitt, 2002). The collective bargaining agreement and public service system, many times, require public institutions to design and enact policies and procedures that emphasize equitable treatment for all employees, regardless of classification. However, these practices can limit postsecondary institutions from competing effectively with their private counterparts (Dewitt, 2002).

Lastly, many institutions view vacant positions as cost savings, as opposed to a lost opportunity (EDUCAUSE, 2000). The lost opportunity can result from projects being delayed or shelved, or uncompleted (Coombs, 2009). Leaving positions unfilled can result in an overall decline in productivity (Jacobs, 2011). Oftentimes, the employees, who remain, become less productive due to having to assuming responsibility for the work of the employee or employees, who left (Jacobs, 2011). Additionally, these vacant positions can result in overworking existing staff, which can lead to more turnover (Oxley, 2008). Effective HR and management practices can facilitate creating good work environments for recruiting and retaining employees.

IT Professionals Characteristics

Another challenge facing public institutions with recruitment and retention of information technology professionals is that these workers are different from workers in other professions (Calisir et al., 2011). One distinguishing factor of information technology professionals is the fact that they are highly skilled workers. One of the Science, Technology, Engineering, and Mathematics (STEM) clusters is the Computer and Mathematical Science occupation, under which

information technology professionals fall. In 2008, the Computer and Mathematical Science occupation was the largest category in the STEM cluster and accounted for 3.4 million jobs (Carnevale, Smith, & Strohl, 2010). More importantly, 69% of these workers possessed a bachelor's degree or higher educational attainment level (Carnevale et al., 2010). The 2020 projections for their educational attainment are expected to increase. According to a recent report by the Center on Education and the Workforce, 60% to 84% of the workers employed in computer-related occupations possess an bachelor's degree or higher (Carnevale, Smith, & Strohl, 2013).

Another distinguishing factor of information technology professionals is their higher need for achievement (Fu, 2010). Need for achievement referred to an individual's desire to increase self-regard through the accomplishment and mastery of difficult tasks (Kreitner & Kinicki, 1998).   As such, information technology professionals seek progressively challenging assignments to satisfy this high need for achievement (Fu, 2010).

The nature of their jobs is different from other professions. Oftentimes, these individuals may work long hours, late nights, meetings after-hours, and on-call duty (Armstrong, Riemenschneider, Allen, & Reid, 2007). They work in dynamic environments that require constant training activities (Fu, 2010) to update their skills and knowledge (Ahuja, 2002; Calisir et al., 2011; Chang et al., 2011). Failure to keep their skills current results in professional obsolescence (Agarwal & Ferratt, 2002), which can impede advancement (Fu, 2010).   Additionally, the activities performed by these individuals require a continual state of crisis and conflicting deadlines, that require rushing to meet expectations (Armstrong et al., 2007).   The nature of IT work is project oriented. It is coupled with fast

technology changes, which require IT professions to continually update the skills (Armstrong et al., 2007).

Lastly, IT professionals are more likely to leave their organizations. Based on conventional wisdom, many organizations believed that paying their IT professionals well and providing these workers challenging and engaging tasks was sufficient for retaining these individuals (Agarwal & Ferratt, 2002). Despite offering competitive salaries and opportunities to work with emerging and current technologies, many organizations continued to experience IT turnover that was higher than expected and desired (Agarwal & Ferratt, 2002). One explanation for this phenomenon could be that IT professionals possess stronger tendencies to turnover. Korunka et al. (2008) asserted that IT professionals have a strong propensity to leave their current employers in order to work for another organization (Korunka et al., 2008). Although this propensity to leave occurred more readily during the early days of computing, this phenomenon continues to persist as many organizations continue to face high turnover among their information technology workers (Korunka et al., 2008). Agarwal and Ferratt (2002) argued that assertive human resource and management practices are required to overcome this outflow of intellectual capital.

Demand for Qualified Workers

Projections for computer jobs for 2020 suggested the demand for information technology professionals continued to grow (Lockard & Wolf, 2012). This growth reflected the increased demand for information technology professionals. In the early part of this century, entrepreneurial pursuits and the Internet proliferation were the major drivers for organizations' dependence on the information technology professionals (Agarwal, Ferratt, & De, 2007). The resulting effect has led to information technology professionals remaining a

critical and strategic resource for organizations (Agarwal et al., 2007). Today, social computing, mobile computing, big data, and cloud computing, are driving this dependence (Pettey, 2012). In a press relief by Gartner Inc., the senior vice president of Gartner stated that the demand for big data support will result in 1.9 million IT jobs in the U.S and 4.4 million IT jobs globally by 2015 (Pettey, 2012).

Similarly, the Bureau of Labor Statistics (BLS) suggested that the industry demands for systems design and related services are spurring growth for computer jobs (Lockard & Wolf, 2012). According to BLS, the U.S. economy will add 20.5 million new jobs during the 2010-2020 decade representing a 14.3% increase (Lockard & Wolf, 2012). For Computer and Mathematical occupations, BLS projected a 22% growth in new jobs from 2010 to 2020 (Lockard & Wolf, 2012). This growth projection made the Computer and Mathematical occupations the sixth fastest growing occupational group (Lockard & Wolf, 2012). During the 2006 to 2010, this occupational group added over 229,000 new jobs (Lockard & Wolf, 2012). In 2010, jobs in information technology accounted for 3.4 million of the 3.5 million jobs in this occupational group (Lockard & Wolf, 2012). For 2010 to 2020, BLS projected these jobs to grow at a rate 22.1% with applications software developers showing the greatest demand (Lockard & Wolf, 2012). Spurring this growth are the industry demands for systems design and related services (Lockard & Wolf, 2012).

This growth in the demand for information technology professionals presents a challenge for educational institutions as they compete on par with private and for-profit organizations. Perhaps, the most significant factor affecting this challenge is the economic climate. March and Simon (1958) asserted that the state of the economy was the single and most accurate predictor of labor turnover. In economic upturns, turnover activity increased due to the increased number of

jobs (March & Simon, 1958; Mowday, Porter, & Steers, 1982). Conversely, in economic downturns, turnover activity decreased as the availability of jobs diminished (March & Simon, 1958; Mowday et al., 1982). With the economic climate in the U.S. improving, turnover activity will increase (Jacobs, 2012). According to an executive brief published by the Society for Human Resource Management, "employees who have waited for the economy to stabilize may begin seeking new employment" (Jacobs, 2012, n.p.). As such, turnover rates will likely shift with some industries experiencing higher turnover rates as compared to others (Jacobs, 2012). With the greater demand for information technology professionals in the systems design and related services, as well as, the demands from big data and cloud computing, turnover activity will most likely increase as the more marketable and individuals move from higher education to organizations with more competitive and attractive offerings (BLS, 2014).

Context of the Study

The goal of this study is to examine the perspectives of public higher education employees on job embeddedness and intentions to stay. This study will explore the relationships of other variables related to job embeddedness. Additionally, this study will investigate the differences in job embeddedness and intentions to stay between information technology professionals and non-information technology professionals. To this end, the researcher will recruit participants from the California State University (CSU) system.

The CSU, located in California, serves close to 447,000 students and 44,000 faculty and staff (California State University System, 2012). The CSU is one of the largest, most diverse, and affordable public university system in the United States (California State University System, n.d.-a). Twenty-three campuses comprise the CSU system. These universities are spread throughout

California. Humboldt State University is the northern most campus located in Eureka. The most southern campus is San Diego State University, which is located in San Diego (California State University System, n.d.-b).

According to the Profile of CSU Employees: Fall 2013, the CSU employed 32,291 full-time employees (California State University, 2013). Of the full-time employees, 51.7% were women and 55.3% were White. The median age of the full-time employees was 48.3 years. The majority of the employees were staff (60.2%) followed by faculty (35.5%) and management (4.4%). Employees in staff positions worked in professional / technical occupations, office / administrative support, service occupations, and construction / maintenance / transportation occupations. Of the staff positions, professional / technical occupations (34.8%) represented the second largest occupational group. IT professionals fall within the professional / technical occupations (California State University, 2013).

The CSU system provides a rich and complex environment in which to conduct this study. The twenty-three locations offer opportunity to explore off-the-job embeddedness based on the differences in communities. These communities vary in the cultural amenities, weather, and proximity to recreation and entertainment. Additionally, the CSU as a whole represents a diverse environment of employees working in a range of occupational groups, gender diversity, and length of employment with the organization.

Significance of the Study

Lo (2013), in a review of turnover research on information technology professionals, argued that much of the research on turnover among information technology professionals had matured. A preponderance of the studies on the turnover of information technology professionals was similar in nature (Lo, 2013). These studies used similar variables, which resulted in similar findings (Lo, 2013).

These studies focused on antecedents of turnover as proximal and distal factors as predictors of turnover intention. Lo (2013) argued that future research needed to advance the literature on voluntary turnover among information technology professionals.

In a review of the turnover literature on information technology professionals, Lo (2013) noted several research areas worthy of additional investigation. First, the researcher noted that prior research alluded to the uniqueness of information technology professionals, but few of the studies actually provided empirical evidence of these differences. The researcher argued that the findings from these prior studies did not distinguish information technology professionals from other highly skilled professionals.

A paucity of research exists on job embeddedness and turnover of information technology professionals in any context (Joseph, Kok-Yee, Koh, & Soon, 2007; Lo, 2013), not to mention in the public higher education system. Joseph et al. (2007) advocated that future research should explore the fit, links, and sacrifice constructs associated with the job embeddedness theory to explain turnover among information technology professionals.

This study aims to address a gap in the literature regarding the factors that affect job embeddedness and turnover of information technology professionals and hopes to add to the body of research on turnover among information technology professionals by providing empirical support of the uniqueness of these individuals as compared to other professions. Lastly, this study has the possibility to add to the turnover literature on information technology professionals in public institutions, more specifically ones employee in public higher education systems.

Theoretical Framework

Job Embeddedness Theory

The job embeddedness theory advanced by Mitchell et al. (2001) is a recent turnover model that focused on the reasons employees stay with their organizations. The job embeddedness theory was in contrast to prior research, which concentrated on the attitudinal factors that led employees to leave their employers. Mitchell et al. (2001), in their review of prior research, concluded that non-attitudinal factors played a role in the cognitive processes that employee underwent leaving or remaining with their employers. Mitchell et al. (2001) noted that negative attitudes were not the predominant reason employees left their employers. Several observations led the researchers to this conclusion. First, employees, despite being satisfied with their jobs, left their employers. Second, some employees left their organizations without engaging in job searches. Third, some employees as suggested by Lee and Mitchell (1994) experienced a shock to their system, yet the employees stayed with the organization. Fourth, the researchers surmised that off-the-job interactions could produce similar shocks to employees' systems. Lastly, the researchers reasoned that previous models based on attitudes and job search failed to provide moderate predictions for employee voluntary turnover.

Underlying the job embeddedness theory is the concept of embedded figures and Lewin's (1951) field theory (Mitchell et al., 2001). The concept of embedded figures comes from psychological testing. This concept suggested that that the figures or images immersed into their surrounding background in such a way that the two were inseparable (Mitchell et al., 2001). The Field Theory added to the concept of embedded figures by confirming the interaction between individuals and their surrounds. In the Field Theory, Lewin (1951) posited that

the environment or life space of individuals influenced their behavior. Lewin (1951) drew this conclusion from the inter-relatedness between all aspects of the individuals' lives and their surroundings, as well as their conditions. These two concepts, embedded figures and Field Theory, suggested that attitudes or perceptions were not the sole basis for individuals' behaviors, but resulted from the influences from the individuals' environments on different aspects of the individuals' lives. The inter-relations of the environment and the individual were inextricable, thereby embedded.

Job embeddedness refers to interconnectedness of employees with their organization and community (Mitchell et al., 2001). Prior research revealed that this multidimensional construct explained more of the variance in turnover than other traditional and non-traditional theories on turnover behavior. This theory has been studied in different professions, including hospital personnel, nurses, information technology professionals, coaches, financial employees, managers, and grocery store employees (Reitz & Anderson, 2011). The framework considers three causal factors based on two contexts. The three constructs include links, fit, and sacrifice. The context dealt with forces from within the organization and external to the organization, the community. The combination of the causal factors and contexts produces six dimensions that explain employees' intentions to stay or leave an organization.

The job embeddedness theory is a multidimensional construct consisting of three causal factors: links, fit, and sacrifice as influenced by two dimensions: community and organization. The combination of the causal factors and dimensions results in six constructs: links to organization, links to community, fit to organization, fit to community, sacrifice to organization, and sacrifice to community. Figure 2 illustrates the Job Embeddedness construct.
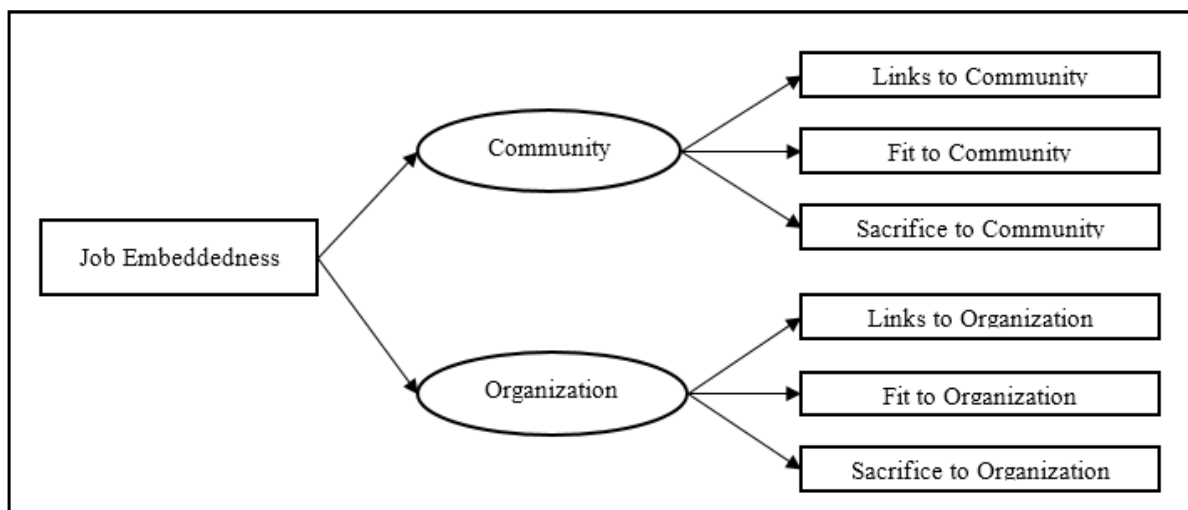
Figure 2. Job embeddedness model.
Note: This figure shows that within community and organization, the forces that embed employees come from three causal factors: links, fit, and sacrifice. The result of the connections and causal factors produced six dimensions: Links to Community, Fit to Community, Sacrifice to Community, Links to Organization, Fit to Organization, and Sacrifice to Organization. Adapted from (Mitchell et al., 2001)

Links

Links consider the connections between employees, their organizations, and community. These links could be formal or inform. As with embedded figures, links suggested that connections existed between people and their organization and community. The interconnectedness of these links created a web in which people become enmeshed. Mitchell et al. (2001) theorized that employees with more or tighter links were attached more closely to their organization and their community more closely. The theorists noted that the extent and number of these links varied among people. This causal factor yields two dimensions: links to organization and links to community.

Links-to-Organization. Links-to-Organization referred to the attachments that the employees develop overtime toward their organization (Mitchell et al., 2001). These organizational links considered job involvement, such as the level of engagement the employees had with their peers, team members, and committee

members. Additionally, it dealt with personal characteristics, such as the employee's age, length of employment, and affiliation with professional organizations (Mitchell et al., 2001). Other organizational links that could embed an employee were the benefit packages, such as pay and incentives, educational assistance (i.e. tuition waivers), paid training, and retirement plans.

Links to community. Links to Community considered the attachments that people have outside of their organization (Mitchell et al., 2001). These attachments derive from non-work factors. These non-work factors could include employee connections to their family, church, local organizations, or friendships with other members within their community (Mitchell et al., 2001).

Fit

Fit considered the compatibility between the employees' personal values, goals, and aspirations and their organization and community (Mitchell et al., 2001). Mitchell et al. (2001) theorized that higher levels of fit led to higher probability of professional and personal attachment with the organization. This causal factor yielded two dimensions: Fit to Organization and Fit to Community.

Fit to organization. The Fit to Organization dimension considered the compatibility of job with the employees' personal attributes. The employees' perception of organizational fit looked at aspects of their jobs, such as job demands, job knowledge, job skills, and job abilities (Mitchell et al., 2001)

Fit to community. The Fit to Community dimension considered the employees' perception on how well their community or environment fit their goals, values, and aspirations (Mitchell et al., 2001). Compatibility with the community involved the employees' perception of the convenience and amenities their surrounding area provided. These factors included the availability of

entertainment, outdoor activities, and churches are other relevant culture. Other factors included the weather, transportation, and schools (Mitchell et al., 2001).

Sacrifice

Sacrifice involved the employees' perceptions of the effects of severing ties with their organization or the community (Mitchell et al., 2001). When employees leave their job, the employees walk away from relationships with co-workers and clients, opportunities to work on interesting projects, or other company benefits. The researchers theorized that employees were less likely to leave the organization when losses associated with leaving the organization were greater (Mitchell et al., 2001).

Sacrifice-to-Organization. The Sacrifice-to-Organization dimension looked specifically at the employees' perception of the opportunities and benefits forgone if they left (Mitchell et al., 2001). Employees' considerations could consist of the loss of stock options, length of employment, flexible schedules, and relationships with co-workers and clients. In some cases, the considerations could take into account having to pay higher premiums for health insurance or retirement contributions. More importantly, the non-portability of pension plans could play a role in the sacrifice employees incur with leaving.

Sacrifice-to-community. The Sacrifice-to-Community dimension concentrated on the employees' perception of the severed ties if the employees relocated away from their community (Mitchell et al., 2001). These considerations comprise leaving communities that are rich in culture, proximally located near beaches or other amenities, and safe. Other considerations could include box seat tickets to the local philharmonic symphonies or short commute times.

Summary

In summary, the job embeddedness construct emphasized the reasons employees remain with their employers. The construct focused on the links or attachments, the fit or compatibility, and the sacrifice or effects employees perceived toward their job and their surrounding environment. The confluence of these three causal factors in relation to their job and community produced a web of interconnectedness that determined the employees' embeddedness. This study will investigate these intentions of higher education employees based on these six dimensions: links to community, fit to community, sacrifice to community, links to organization, fit to organization, and sacrifice to organization. Table 1 summarizes the six dimensions of the job embeddedness construct as discussed above.

Table 1

Job Embeddedness Dimensions

Causal Factors	Organization	Community
Links	Links to Organization: The attachments that the employees develop over time toward their organization	Links to Community: The attachments that employees develop over time toward their community
Fit	Fit to Organization: The compatibility between aspects of the job and the employees' personal attributes	Fit to Community: The compatibility between aspects of the community and the employees' personal attributes
Sacrifice	Sacrifice to Organization: The employees' perception of the effects of severing links to their job	Sacrifice to Community: The employees' perception of the effects of severing links to their community.

Research Questions

Based on prior research in the area of job embeddedness, turnover among information technology professionals, and potential uniqueness of information technology professionals, this study aims to address the following three research questions.

Research question 1: To what extent did job embeddedness predict the intentions to stay among employees of public higher education?

Research question 2: How did public higher education employees perceive their job embeddedness on intentions to stay?

Research question 3: To what extent did job embeddedness and intentions to stay vary between IT professionals and non-IT professionals in public higher education?

Definition of Terms

Information Technology Professionals

Information technology professionals (ITP) are employees who work in technology-related positions. In these positions, they are responsible for technical service and support, information technology management, network operations, system integration and development, application development, web design, project management, information technology procurement, technical end-user support, implementing information technology solutions, information technology infrastructure, Internet protocols, or sales and support of information technology solutions (Ghazzawi, 2008).

Quit

Quit refers to the voluntary action of an employee to leave from their current employer for another employer. Quit does not refer to transfers or retirement, which are voluntary action that do not involve interfirm movement.

Price (1977) stated that interfirm movement was a criterion for voluntary action of employee separations.

Turnover

In general, turnover refers to the involuntary and voluntary separation of employees from their employers (Price, 1977). Involuntary turnover involves layoffs, terminations, and other dismissals. Voluntary separation refers to quitting, as defined above. For the purposes of this study, turnover will be considered voluntary and synonymously with quitting.

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Summary

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Institutions of higher education are responding to demands for greater accountability, performance, and transparency. In their quests to meet these demands, these institutions, like other organizations, are relying more on technology to inform their decisions and courses of action. The ability to manage and use these technologies requires the talent and energy of information technology professionals. As such, the retention of these key employees is critical to the furtherance of an organization's technological strategies. Effective recruitment and retention policies are necessary to reduce costly and disruptive turnover, as well as, to increase employee wellbeing.

The pervasive nature of turnover has continued to plague organizations. Turnover occurs regardless of economic climate. However, turnover activity tends to increase as the availability of jobs increases. The negative consequences of turnover cost organizations directly and indirectly. In environments, such as the private sector, organizations have more ability to offer attractive compensation and benefit packages that can reduce voluntary quits. For public higher education institutions, the public service system and college bargaining agreements constrain

their retention efforts. These constraints impede public institutions from competing effectively with their private counterparts.

The characteristics of information technology professionals, the nature of their work, and the demand for their skills create additional challenges in recruiting and retaining these individuals. Information technology professionals are highly skilled. In 2008, 69% of these workers possessed a bachelor's degree or higher educational attainment level (Carnevale et al., 2010). Information technology professionals have a high need for achievement (Fu, 2010). As a result, these individuals seek progressively challenging assignments to satisfy this high need for achievement.

Information technology professionals may work long hours and late nights, attend meetings after-hours, and perform on-call duty (Armstrong et al., 2007). The nature of IT work is project oriented. At times, these individual work in a continual state of crisis, conflicting deadlines and expectations (Armstrong et al., 2007). Due to the fast and dynamic nature of IT work, information technology professionals must continually update their skills (Ahuja, 2002; Armstrong et al., 2007; Fu, 2010). Failure to maintain their skills results in professional obsolescence, which impedes their advancement (Fu, 2010).

Lastly, information technology professionals are in great demand. Support for big data and other emerging technologies are driving the demand for these critical resources. Gartner reported that the demand for big data support could produce as many as 1.9 million IT jobs by 2015 (Pettey, 2012). BLS projects the demand for information technology professionals to grow by 22% between 2010 and 2020. This greater demand will subsequently lead to increased turnover activity among these individuals, which will further strain the retention efforts of organizations, especially institution of higher education.

Although national quit rates in 2012 was 18.8% (Hathaway, 2013), 81.2% of the total employed remained with their employers. Designing effective recruitment and retention strategies requires a greater understanding of the reasons these employees chose to stay. The job embeddedness theory can help organizations gain an understanding of why employees remain with their organizations and why others leave (Mitchell et al., 2001). This theoretical construct is a key predictor of employees' intentions to remain with their organization (Reitz & Anderson, 2011). As such, the job embeddedness theory will provide the theoretical framework for this study. In addition, this study will add to body of research on job embeddedness, as well as, on the uniqueness of information technology professionals.

CHAPTER 2: REVIEW OF THE LITERATURE

Introduction

This study aimed to build a greater understanding of the retention of information technology professionals in higher education. By gaining a better understanding, higher education institutions can reduce turnover costs and can implement institutional policies that foster the retentions of these individuals. Prior research focused on explaining the intentions of leaving among information technology professionals or other employees. Comparatively few studies studied the reasons why these employees remained with their employer. As such, this literature review aimed to build an understanding of how job embeddedness explained retention. This literature review focused on prior turnover research, as well as, reviewing non-traditional turnover model that emphasized retention.

This chapter provides an overview of the traditional and non-traditional theories on turnover, as well as, research on job embeddedness. This chapter focuses on the research related to the research questions identified in the chapter one. The purpose of this chapter is to investigate the research on the factors that stimulate turnover or retention intentions among employees in higher education, especially information technology professionals.

Turnover

Turnover occurs when an employee actually separates from the organization. Price (1977) asserted that turnover involved employees acting voluntarily, moving to another organization, relinquishing their position and responsibilities, and separating from their employer. Voluntary actions refer to the independent actions of individuals, who willingly leave one organization for another organization. As such, these voluntary actions do not refer to intra-organizational movements, such as promotions and transfers. Retirements are

voluntary actions, but these actions do not involve interfirm movement. When an individual retires, they separate from their employer. Typically, they do not retire with the primary objective of seeking employment with another organization. As such, turnover does not include retirements. Furthermore, turnover does not include involuntary actions for leaving an organization, such as firings.

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Traditional Theories of Turnover

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For over 50 years, researchers have studied turnover behavior to determine the factors that lead individuals to leave an organization. The resultant research has yielded several theories and models. Three of the most cited theories and models are the theory of organizational equilibrium (March & Simon, 1958), the theory of met expectations (Porter & Steers, 1973), and the linkage model (Mobley, 1977).

Organizational Equilibrium Theory

The theory of organizational equilibrium is, perhaps, the oldest theory that attempts to explain the turnover intention among employees. Additionally, this theory is at the core of subsequent research on turnover intention (Joseph et al., 2007). In the theory of organization equilibrium, March and Simon (1958) postulated that imbalances between inducements and contributions increased the likelihood of individuals leaving an organization. Inducements referred to the compensation that the worker received. Contributions referred to the work performed by the workers. In other words, the propensity of individuals leaving an organization resulted from discrepancies between the compensation received and the work performed. Further, March and Simon (1958) asserted that this imbalance was a function of the individual's perceptions on the desirability of leaving the organization and on the ease of movement from the organization.

The desirability of leaving an organization encompassed factors that motivated individuals to want to leave their employer (Lo, 2013). Two major factors affect these perceptions in individuals (March & Simon, 1958). The first factor was the level of satisfaction in which the individual derived from their job. March and Simon (1958) asserted that the perceived desirability of movement was lower in individual's, who experienced higher levels of satisfaction from their job. The second factor that affected the desirability of leaving an organization was the perception of opportunities to move intra-organizationally (March & Simon, 1958). The researchers argued that in large organizations, individuals have a greater opportunity to stay with the organization by moving to another department or division. As such, March and Simon (1958) asserted that the perceived desirability of movement was lower in individual's, who perceived that opportunities for intra-organizational movement existed.

In addition to the perceived desirability of movement, ease of movement from the organization was another outcome from the imbalance of inducements and contributions (March & Simon, 1958). The researchers reasoned that employees were more willing to accept alternative employment, when the ability to leave the existing employer was unproblematic. The researchers reasoned that the labor market was a primary factor in employees' perceptions on the available. During economic upturns, job alternatives were plentiful, which led to higher rates of voluntary movement. Conversely, during economic downturns, job alternative were scare, which resulted in lower rate of voluntary turnover.

Additionally, March and Simon (1958) posited that the perceived availability of job alternatives depended upon the employees' individual characteristics, such as age, gender, social status, and tenure. Previous studies revealed that men reported higher turnover rates than women; older workers

reported lower turnover rates than younger workers; Whites were more likely to
leave an organization, as compared to Blacks; and workers with higher skills sets
due longer tenure were more likely to stay. Figure 3 illustrates the Organization
Equilibrium Theory by showing the two main constructs and their antecedents.
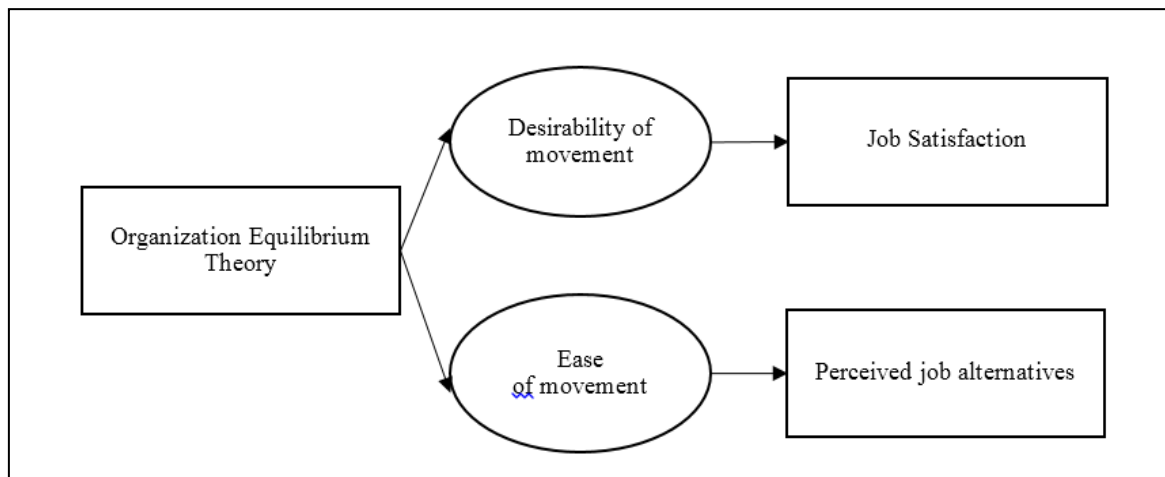
Figure 3. Organization equilibrium theory.
Note: Organizational Equilibrium Theory consisted of two main constructs, desirability of
movement and ease of movement. Desirability of movement resulted from the employees' job
satisfaction. The employees' perceptions on the utility of job alternatives comprised the ease of
movement. Adapted from (March & Simon, 1958)

Met Expectations Theory

Porter and Steers (1973) built upon the organizational equilibrium theory
by exploring alternative explanations for turnover among employees. In a review
of the findings from unproblematic research on turnover, Porter and Steers (1973)
concluded that met expectations contributed to the withdrawal behaviors, such as
absenteeism and turnover, of employees. The researchers reasoned that each
employee arrived at the workplace with a predetermined set of expectations that
were unique to that employee. When employees met with positive or negative
experiences in the workplace that ran contrary to the employees' expectations for
the workplace, the employees would exhibit withdrawal behaviors, such as
absenteeism and turnover. The researchers conceptualized this phenomenon as

met expectations. As such, the researchers defined met expectations as the disparity between the negative and positive experiences encountered on the job and the experiences that the individuals expected to encounter on the job.

Furthermore, the researchers reasoned that the employees' withdrawal was not an arbitrary decision, but a process wherein the individual considered the rewards or the potential for rewards in balance with their desired expectations (Porter & Steers, 1973). These rewards could include awards, promotions, raises, and positive relationships with peers, supervisors, and managers. The researchers posited that employees, who perceived that the rewards met or exceeded their expectations, possessed increased satisfaction levels and had a greater propensity to stay with the organization. Conversely, employees, who perceived that their expectations for reward were unmet, exhibited lower levels of satisfaction and greater intentions to leave the organization. As such, the researchers posited that the unmet expectations of the individuals led to decreased levels of satisfaction derived from the job and increased the propensity of these individuals to withdraw or to leave an organization.

Linkages Model

Mobley (1977) concluded that previous research focused on the relationship between turnover of employees and job dissatisfaction, but none of the research established connections between the two constructs. The researcher asserted that mediating factors existed between employees experiencing job dissatisfaction and the employees' subsequent turnover behavior. The researcher pursued this line of study based on two assertions made by Porter and Steer's (1973) in their extensive review of turnover research. First, the researcher sought to respond to Porter and Steers' (1973) assertion that further research on the withdrawal process was necessary. Second, the researcher wanted to determine

whether the next logical step after experiencing job dissatisfaction was to express intentions to leave the organization, as suggested by Porter and Steers (1973). To this end, the researcher proposed a heuristic model for the withdrawal process.

The model suggested that the withdrawal process consisted of a series of decision points. At each decision point, the employee would determine whether to continue, to revisit previous decisions, or to stop the process. The process began with the employee evaluating the present job. The evaluation would result in the employee feeling either satisfied or dissatisfied with the job. Feelings of dissatisfaction would lead to thoughts of quitting. These thoughts of quitting would lead to the employee evaluating the expected utility of searching for another job and the cost associated with quitting.

This process of evaluating the utility of perceived job alternatives reflected the research of March and Simon (1958) regarding the ease of movement from the organization. If the employee perceived that job alternatives existed and that the cost of quitting was not prohibitive, then the employee would commence with searching for alternative employment. If attractive alternatives existed, the employee would compare the job alternatives to their current job. If the employee found the alternative job to be more attractive than the current job, then the finding would stimulate turnover intention in the employee. Subsequently, the turnover intentions would lead to actual turnover behavior.

Mobley (1977) noted that the process was not sequential. Some employees did not progress through all the steps in the proposed sequence. In fact, some employees actually entered the process at different points in the progression. Other employees repeated different steps in the proposed process. Furthermore, some employees skipped the steps altogether, jumped to the final step, and left the organization. Mobley (1977) characterized the actions of these employees as

impulsive. Despite the progression patterns followed by the employees, the Linkages Model provided empirical evidence of the mental deliberations that employees underwent before voluntarily turnover. Figure 4 depicts the linkages between the decision points that employees may consider in deciding to leave or remain with their employers.

The arrows represent different paths that employees could take to staying or quitting. The shortest pathway through the Linkages model is (A) to (J). In this pathway, employees evaluated their current job (A) and decided to stay or quit (J) without further deliberations or antecedent behaviors, such as job search or job comparisons.

The longest pathway through the Linkages model began with the employee appraising their existing job (A), experiencing job satisfaction or job dissatisfaction (B), developing thoughts of quitting (C), and assessing the expected usefulness of job searching and estimating the cost of quitting (D). Next, the employee would decide to search for alternative job opportunities (E), search for job alternatives (F), appraise their job alternatives (G), compare the alternatives to their current job (H), formulate an intent to quit or stay (I), and subsequently quitting or staying with their employer (J).

The path (A, H, I, J) represented another path employees progressed through the Linkage model. In this pathway, the employees evaluated the current state of their job (A), compared alternative job opportunities to their present job (H), developed an intention to stay or leave (I), and subsequently remained with or left their employer (J). The Linkages model provided a visual and conceptual framework that attempted to explain the deliberations and behaviors employee underwent to arrive ultimately at staying or quitting.
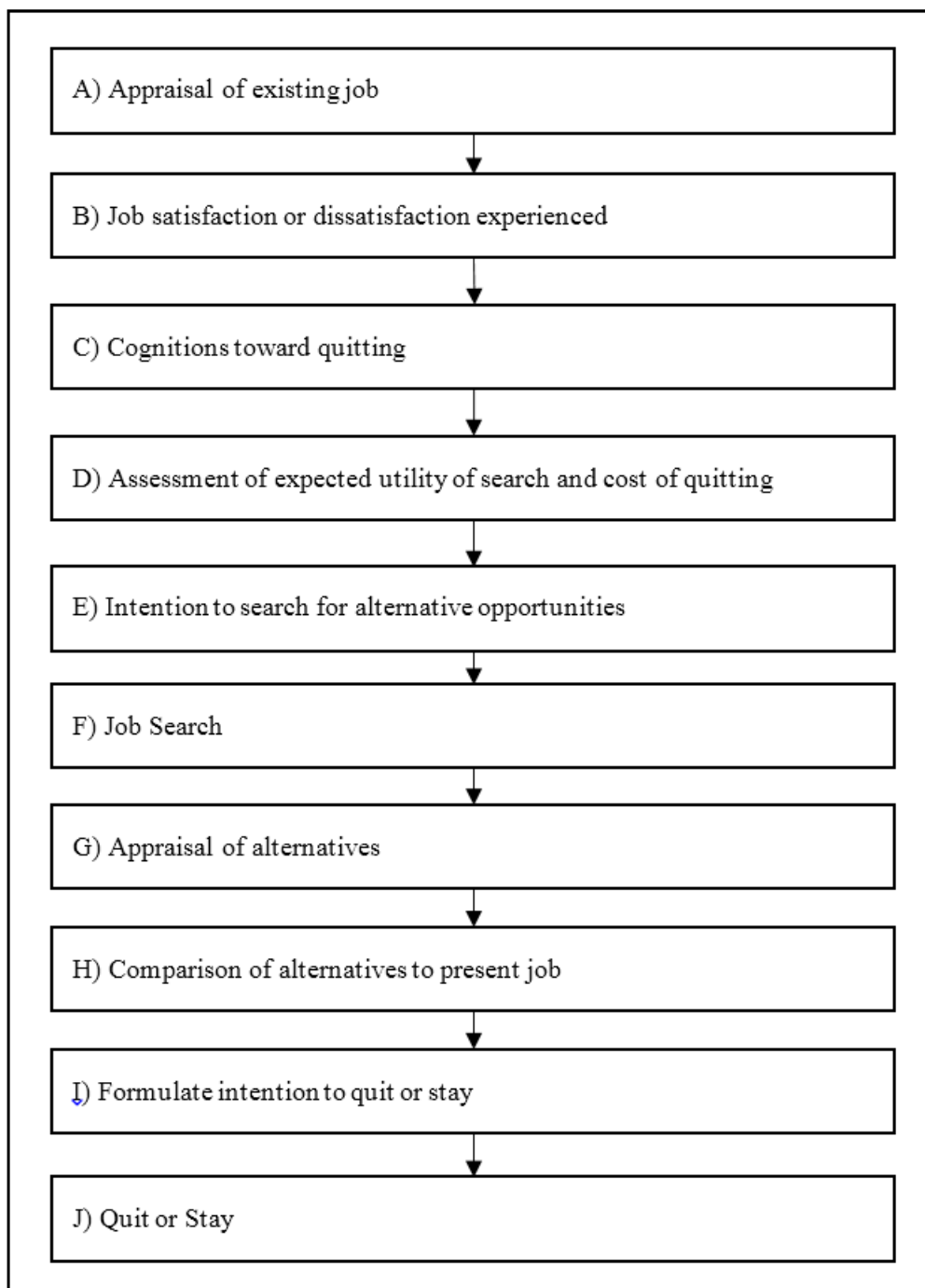
Figure 4. Linkages model.
Note: This model illustrates the cognitive paths employees would take to arrive at the decision to stay with or leave their employer. Adapted from (Mobley, 1977).

Non-traditional Models of Turnover

March and Simon's (1958) theory of organizational equilibrium is at the core of most traditional models of turnover. These traditional models focused more on attitudes as predictors or antecedents of employee's intentions to leave. In contrast, non-traditional models of turnover offer alternative perspectives on why employees leave or stay with an organization. The two most recognized models are the unfolding model of turnover and the job embeddedness theory.

Unfolding Model of Turnover

Lee and Mitchell (1994) argued that different mental deliberations led to employees leaving their organization. In the Linkage Model proposed by Mobley (1977), the final step encompassed impulsive decisions to leave an organization. However, Mobley (1977) did not offer any explanation or elaboration on the cognitive processes that led to this impulsive behavior. Further, Lee and Mitchell (1994) based on mixed empirical support, asserted that the Linkage Model was a weak predictor of actual turnover. Other researchers asserted that the turnover decisions resulted from dual processes (Lee & Mitchell, 1994). In some research, the connection between the turnover process and turnover antecedents, such as dissatisfaction, job search, perceived job alternatives, and perceived utility of job alternatives, were unclear. As such, the researchers concluded that existing models for turnover failed to address other cognitive processes that contributed to turnover decisions. Additionally, Lee and Mitchell (1994) reasoned that latent factors could explain the variances in the processes that employees took to leave an organization voluntarily better.

To this end, Lee and Mitchell (1994) proposed the unfolding model of turnover. The model involved four decision pathways that an employee would traverse depending upon an unsettling event. The researchers referred to this

unsettling event, as a "shock to the system" (p. 60). Shock was theorized as "a very distinguishable event that jars employees toward deliberate judgments about their jobs and, perhaps, to voluntarily quit their job" (p. 60). The nature and impact of the shock must be sufficient as to warrant deliberations regarding their job. The subsequent deliberations would lead the employee to follow one of the four decision pathways.

In the first decision path, Figure 5, the employee experienced a shock (a), which triggered the construction of a decision frame (b). The memory search comprised looking for prior shock experiences (c). If the search resulted in a match (d), the employee behaved based on the actions of the prior shock. When the action of the prior shock involved quitting, the employees voluntarily left the organization (e).
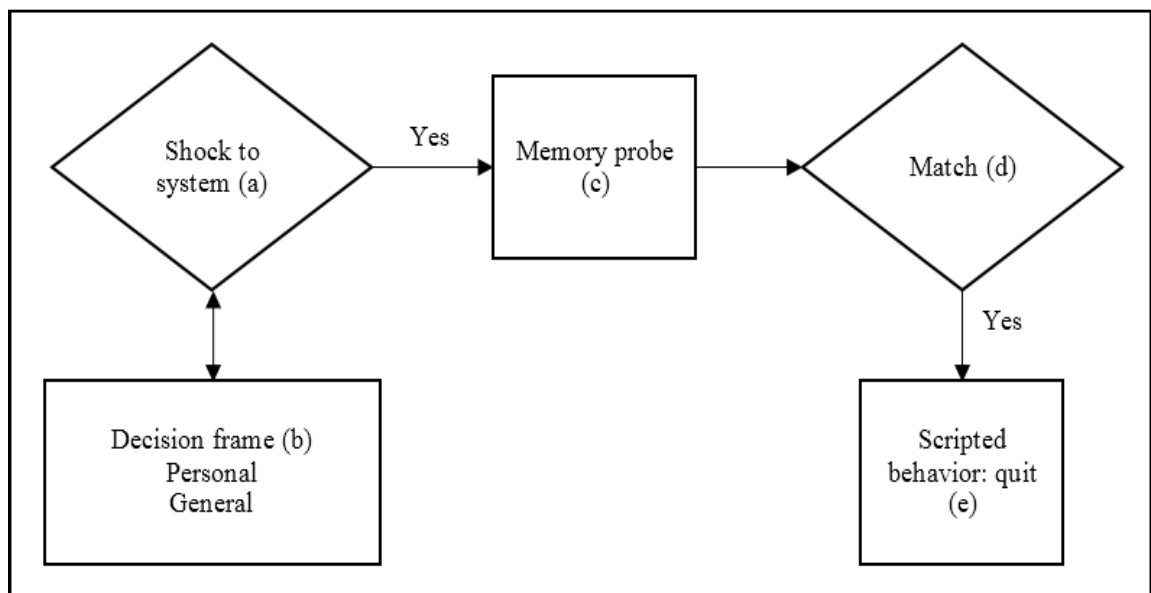
Figure 5. Unfolding model of turnover: Decision path #1.
Note: The diamonds represent decision points. The lines represented the path based on the response to the decision point. The rectangles represented the actions that resulted from the path taken. Adapted from (Lee & Mitchell, 1994).

The second decision path, Figure 6, was similar to the first decision path. The primary difference was that the memory search did not result in a match (d). When a mismatch occurred, the employee engaged in additional mental deliberations. The deliberations involved the employee looking for reasons to stay with the organization (f). If the employee found sufficient reasons, then the employee compared the shocking situation to their personal principles (g). If the situation and the employee's principles matched, the employee stayed with the organization (h). Conversely, a mismatch between the situation and the employee's principles led to voluntary turnover (i).

Figure 6. Unfolding model of turnover: Decision path #2.
Note: The diamonds represent decision points. The lines represented the path based on the response to the decision point. The rectangles represented the actions that resulted from the path taken. Adapted from (Lee & Mitchell, 1994).

The third decision path is the longest and the most complex. In the third decision path, Figure 7, the employee incurred a shocking experience (a) and the

memory search resulted in no match (d). Instead of the employee choosing to focus on staying with the organization (f), the employee focused on leaving and assessing alternatives (j). Like in second decision path, the employee compared the shocking situation to their personal principles (k). If the two fit, then the employee would stay (l).

Figure 7. Unfolding model of turnover: Decision to path #3a.
Note: The diamonds represent decision points. The lines represented the path based on the response to the decision point. The rectangles represented the actions that resulted from the path taken. Adapted from (Lee & Mitchell, 1994).

Alternatively, the employee would follow a decision path focusing on search for alternatives, evaluating alternatives, and ultimately staying or quitting as illustrated in Figure 8. In this case, if the employee had no existing job alternatives, then the employee would commence job searching (m). If the employee found a job alternative, then the employee would measure the alternative against his or her personal requirements (o). If the alternative was not a good fit, then the employee would reject the alternative (p) and move to the next alternative. If another alternative did not exist, the employee would perform another job search (m). However, if the employee had another alternative to consider, the employee would repeat the alternative evaluation (o).
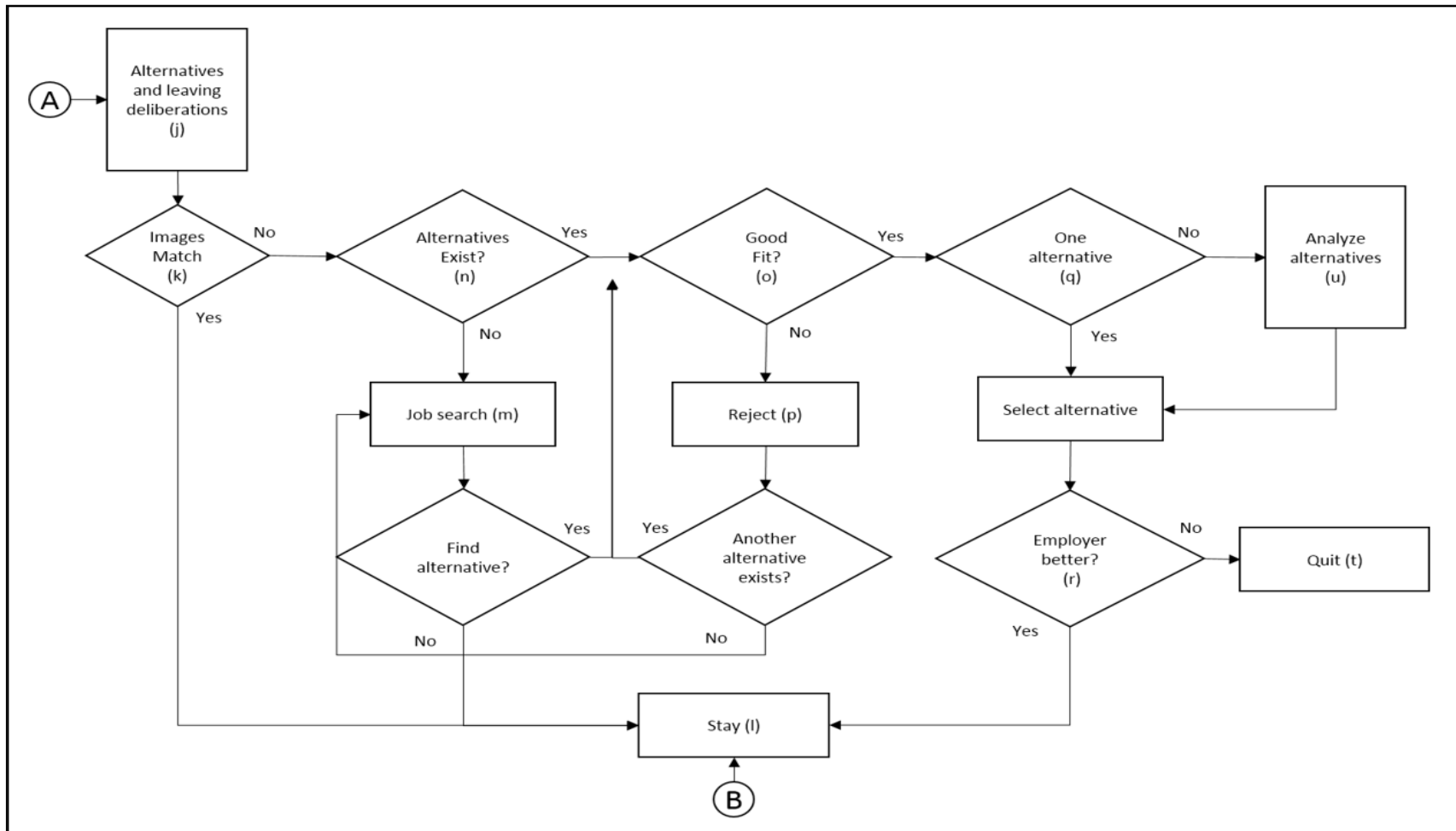
Figure 8. Unfolding model of turnover: Decision to path #3b.

Note: The diamonds represent decision points . The lines represented the path based on the response to the decision point. The rectangles represented the actions that resulted from the path taken. Adapted from (Lee & Mitchell, 1994).

Conversely, if the employee had existing job alternatives, then the employee would evaluate the alternative (o). If the alternative was not a good fit, the employee would follow the reject alternative path (p). Otherwise, if a single alternative arose from the evaluation process (q), the employee would select that alternative. If the selected alternative evaluated higher than the current employer (r), the employee would quit (t).

Otherwise, the employee would remain with the present employer (l). If multiple alternatives emerged in the process (q), the employee would undergo a rational analysis of the multiple alternatives by comparing them to the current employment (r). If the evaluation favored the organization, the employee would stay (l). Otherwise, the employee would leave (t). In the advent that the employee would stay, the situation, decision, and memory would be stored in their decision frame (b).

The fourth decision path, the employee does not experience a shock to the system (a). Figure 9 illustrates this decision path. The decision to stay or leave depends on the fit between the values and expectations of the employee and the organization (y). A values match resulted in the employee feeling job satisfaction and staying. Alternatively, when the values do not match, the employee feels dissatisfaction with the job and potentially quits (z).

The unfolding model of turnover proffered a new direction in turnover literature. It provided an explanation for what previous research considered impulsive quitting. Further, the model provided a naturalistic approach to the ration decision-making employees undergo when deciding to stay with or leave an organization.
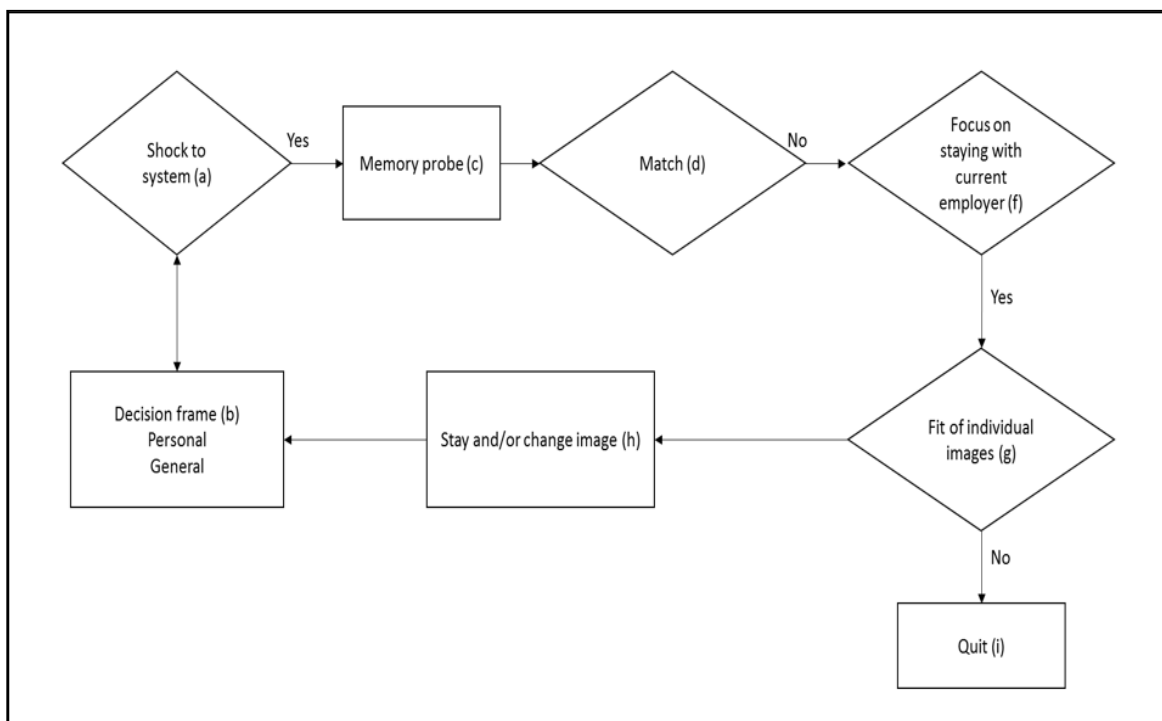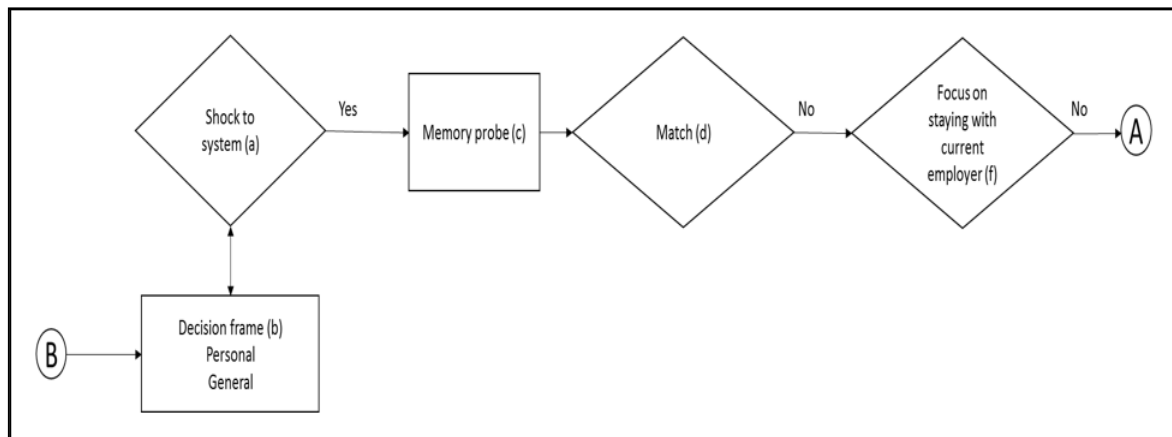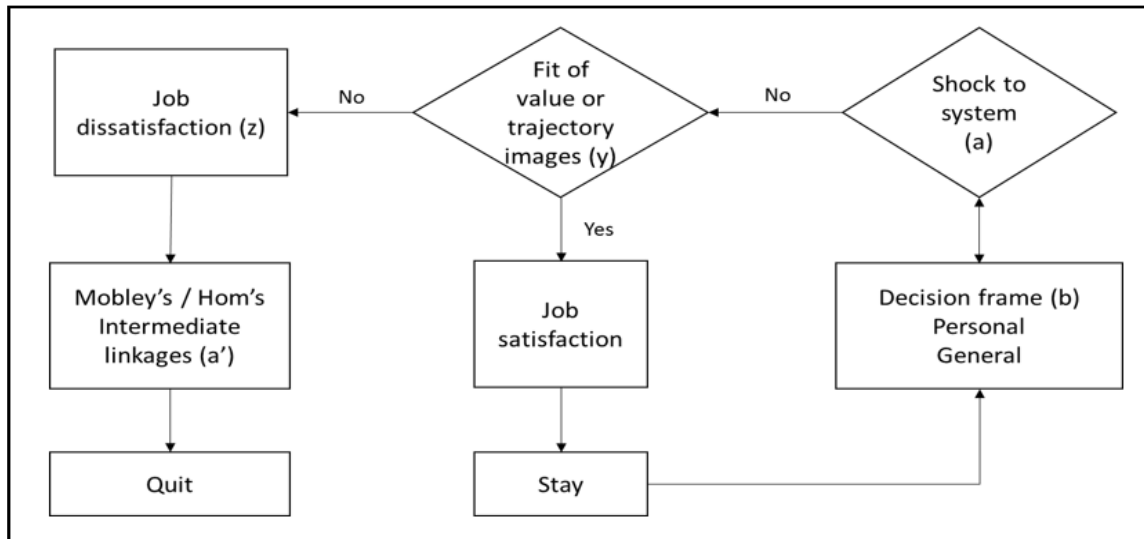
Figure 9. Unfolding model of turnover: Decision path #4.
Note: The diamonds represent decision points. The lines represented the path based on the response to the decision point. The rectangles represented the actions that resulted from the path taken. Adapted from (Lee & Mitchell, 1994).

Job Embeddedness Theory

Where other models and theories concentrated on why employees leave, the job embeddedness theory looked at why employees stay. Job embeddedness refers to interconnectedness of employees with the organization and their community (Mitchell et al., 2001). Prior research revealed that this multidimensional construct explained more of the variance in turnover than other traditional and non-traditional theories on turnover behavior. This theory has been studied in different professions, including hospital personnel, nurses, information technology professionals, coaches, financial employees, managers, and grocery store employees (Reitz & Anderson, 2011). The framework considers three causal factors based on two contexts. The three constructs include links, fit, and sacrifice. The context dealt with forces from within the organization and external to the organization, the community. The combination of the causal factors and contexts produces six dimensions that explain employees' intentions to stay or leave an organization.

Summary of Traditional and Non-traditional

Turnover Models

Traditional turnover research focused on proximal factors for explaining the reasons employees left their employers. The three most cited theories and models were the theory of organizational equilibrium (March & Simon, 1958), the theory of met expectations (Porter & Steers, 1973), and the linkage model (Mobley, 1977). Non-traditional turnover models attempted to expand prior turnover research, to proffer alternative reasons why employees quit, and to explain more of the variance in the prediction of turnover and turnover intentions. The two most recognized models were the unfolding model of turnover (Lee & Mitchell, 1994) and the job embeddedness theory (Mitchell et al., 2001). Table 2 summarizes these traditional and non-traditional turnover models.

Table 2

Turnover Models Summary

Author	Model	Characteristics
March and Simon (1958)	Organizational Equilibrium Theory	• Employees feeling of desirability of movement depended upon their job satisfaction. The greater satisfaction felt then the less likely the employees exhibited intentions of leaving. • Employees' ability to leave depended upon their perceived ease of movement, as reflected in their perceived job alternatives. The more favorable the job alternatives led to an increased likelihood of the employee leaving.
Porter and Steers (1973)	Met Expectations	• Employees met or exceeded expectations led to greater satisfaction and the propensity to stay with the organization
Mobley (1977)	Linkages Model	• Described the psychological process between job dissatisfaction and leaving
Lee and Mitchell (1994)	Unfolding Model of Turnover	• Suggested that after employees experienced a shock they in turn followed one of four decision paths before leaving or staying with their organization

Job Embeddedness Research

Prior research on job embeddedness (JE) has investigated this recent construct by exploring different contexts, such as the private sector and public sectors, and using participants in different occupations, such as grocery workers, nurses, and IT professionals. This section of the literature review focuses on a review of the research on job embeddedness in the private and public sectors, as well as, job embeddedness on IT professionals.

Job Embeddedness and the Private Sector

Most of the research on JE has focused on the private sector. These studies involved participants working in different contexts. These studies explored JE in retail (Mitchell et al., 2001), hospitals (Holtom & O'Neill, 2004; Mitchell et al., 2001), financial institutions (Allen, 2006; Lee, Mitchell, Sablynski, Burton, & Holtom, 2004), assisted living firms (Crossley, Bennett, Jex, & Burnfield, 2007), and various other industries (Halbesleben & Wheeler, 2008).

The first study of JE, Mitchell et al. (2001) introduced the theoretical concept of embeddedness. In their original proposal of the JE theory, the researchers tested their job embeddedness theory with a quantitative analysis involving samples of grocery store and hospital employees. The grocery store sample included 177 randomly selected employees from eight stores. The hospital sample involved 208 employees, who worked in "administration, maintenance, admitting, the cafeteria, and special services" (p. 1109). The researchers administered surveys to both samples. The survey contained 42-items that collected data regarding the participants' personal characteristics, job satisfaction, organizational commitment, job alternatives, job search behavior, intentions to leave, and job embeddedness along six dimensions: links-to-organization, links-to-community, fit-to-organization, fit-to-community, sacrifice-to-organization, and

sacrifice-to-community. From both organizations, the researchers gathered voluntary turnover data.

This study yielded several findings. First, the results showed a negative relationship between embeddedness in the organization and intentions to leave. Additionally, a negative relationship between embeddedness and actual turnover behavior emerged from the findings. Second, the findings revealed that job embeddedness predicted voluntary turnover beyond that of job satisfaction and organizational commitment for both samples. This findings suggested that the more embedded the employee was the less likely the employee would leave their employer. Third, the findings revealed that job embeddedness improved the prediction of turnover above and beyond perceived job alternatives and job search as predictors of voluntary turnover. Lastly, job embeddedness improved the prediction of turnover behavior, in addition to the prediction achieved by job satisfaction and organizational commitment.

In summary, this study proposed a new organization attachment model, job embeddedness. The model helped to explicate the factors that enmesh and entrench employees to their jobs and organizations. Additionally, the model showed that embedded employees were less likely to leave their organizations and had fewer intentions of leaving as compared to employees, who were less embedded. This finding suggested that organizational practices that focused on improving job embeddedness could increase retention. Second, job embeddedness explained more of the variance in turnover. More importantly, this explanation went beyond the traditional models based on March and Simon's (1958) proximal measures, such as perceived desirability and ease of movement, in predicting turnover. Overall, the job embeddedness theory provided a new and innovative

understanding of the antecedents of leaving and staying. Furthermore, the theory complemented and extended the research on turnover.

Organizational citizenship behavior dealt with employees behaviors toward their organization as a result of their attitudes toward their organization (Kreitner & Kinicki, 1998). These behaviors occurred depending on the employees' decisions to participate. March and Simon (1958) theorized that employees made conscious decisions to participate or to not participate in their organizations. When employees chose to participate, the employees would model behavior that was constructive and supportive of the organization. These demonstrations are characterized as organizational citizenship behavior (Kreitner & Kinicki, 1998). Conversely, when employees chose not to participate, the employees would exhibit withdrawal behaviors (March & Simon, 1958). Withdrawal behaviors included actions, such as absenteeism, non-citizenship behavior, and turnover (March & Simon, 1958).

In a study involving employees at a large, international financial institution, Lee et al. (2004) studied the moderation effects of the on- and off-the job embeddedness on absenteeism, job performance, organizational citizenship behavior, and voluntary turnover. The researchers hypothesized that employees, who were embedded both on- and off-the job would exhibit fewer withdrawal behaviors, namely absenteeism and voluntary turnover. Additionally, Lee et al. (2004) reasoned the job embeddedness would influence job performance and organizational citizen behavior.

The researchers surveyed 636 employees, who worked for specific unit managers for the organization. The voluntary turnover was measured using data from the HR department regarding the participants' turnover activity. Using absence data from the HR department, the researchers were able to collect data for

the employees' absenteeism. The organizational citizenship behavior was collected from the participants' immediate supervisors. The immediate supervisor rated their employees using a Likert-scale of 1 to 5 indicating 1 as never and 5 as always in response to 8-statements. The researchers used an adapted version of the survey instrument from the Mitchell et al. (2001) study to measure job embeddedness.

The results of the study showed that on- and off-the job embeddedness were related significantly to turnover, organizational citizen behavior, and job performance. In terms of predictive capability, off-the job embeddedness predicted voluntary turnover and absenteeism and on-the job embeddedness predicted organizational citizenship behavior and job performance.

In terms of the moderation effects of these two dimensions, on-the job embeddedness moderated the positive effects of absenteeism on voluntary turnover. Additionally, on-the job embeddedness moderated the negative effect of job performance on voluntary turnover. For both absenteeism and job performance, the moderation effects on voluntary turnover were stronger for employees expressing higher levels of job embeddedness as compared to employees, who expressed lower levels of job embeddedness.

Both on- and off-the job embeddedness moderated the negative effects of organizational citizenship behavior on voluntary turnover. Again, the greater job embeddedness indicated a stronger moderation effect on organizational citizenship behavior on voluntary turnover as opposed to lower levels of job embeddedness.

In summary, this study revealed that both on- and off-the job embeddedness increased the negative effects of citizenship behaviors on turnover. On-the job embeddedness increased the positive effects of absenteeism and job performance

on turnover and predicted organizational citizen behavior and job performance. In contrast, off-the job embeddedness predicted voluntary turnover and absenteeism.

Holtom and O'Neill (2004) asserted that retaining employees was becoming more of a challenge for healthcare organizations. Measures on the part of the healthcare organizations to contain costs and increase patient care negatively affected the retention of their employees. In addition, turnover rates for medical professionals were higher than the nation average of 21%. For registered nurses working at hospitals, the turnover rates ranged from 10% to 30% and 80% to 90% for nursing assistants employed by nursing homes. Adding to the retention challenge, aging Baby Boomers were retiring, which increased the demands for medical care and for medical professionals to provide medical care. Furthermore, replacing registered nurses and nursing assistants was quite costly. With these factors in mind, Holtom and O'Neill (2004) sought to develop a retention plan informed by empirical evidence.

In their study, Holtom and O'Neill (2004) investigated the job embeddedness of employees working in healthcare using a longitudinal research design. Their study involved 208 employees employed by a community-based hospital located in the north-west region of the United States. The participants responded to a survey that collected data on their personal characteristics and their perceptions on job embeddedness, organizational commitment, job alternatives, job search, and intention to leave. The researcher collected voluntary turnover data from employee records and interviews with the leavers, one year after the administration of the survey.

Holtom and O'Neill (2004) developed three hypotheses. First, the researchers hypothesized that job embeddedness would correlated negatively with the participants' intentions to leave and to quit. The findings supported this

hypothesis, which suggested that more embedded employees were less likely to leave or quit. Second, the researchers hypothesized that job embeddedness would predict turnover above and beyond proximal predictors, such as job satisfaction, organizational commitment, job search, and perceived job alternatives. The findings supported this hypothesis, which indicated that for hospital workers job embeddedness predicted voluntary turnover better, even after controlling for proximal factors. Lastly, the researchers postulated that the factors influencing retention would not differ between nurses and other healthcare workers. The findings supported this hypothesis only partially. For nurses, the links-to-community was more prominent.

In summary, Holtom and O'Neill (2004) showed that among healthcare workers the retention of nurses needed to consider their links-to-community. Additionally, this study confirmed the predictive validity of the job embeddedness construct.

Crossley et al. (2007) , using a cross-sectional survey at three different periods of time, investigated the ability to develop a global measure for embeddedness. The global model attempted to integrate job embeddedness with constructs from traditional turnover models. Crossley et al. (2007) reasoned that job embeddedness represented the contextual and perceptual factors of job embeddedness that influenced behavior. Based on Lewin's (1951) field theory, the researchers felt job embeddedness considered both recognized and unrecognized forces that influence behavior. In contrast, traditional turnover models concentrated on the mental deliberations and discretionary behaviors. However, a global measure had the ability to represent a person's "phenomenal field, reflecting the sum of all recognized forces binding one to one's job" (p. 1033).

Crossley et al. (2007) recruited a cross-section of participants from a medium-sized organization located in mid-western United States. The organization provided assisted living services to youths, who were disabled, and to adults, who were elderly. In the first phase, the researchers administered a survey to 306 participants. The survey collected data regarding the participants' job satisfaction and perceived job alternatives. In the second phase, one month later, the researchers surveyed the participants to measure the participants' intentions on job searching and quitting. In the final phase, one year later, the researchers collected employee records from the participants' employers regarding their employment disposition to measure actual turnover behavior. After one year, 277 employees remained employed and 29 employee quit voluntarily.

The findings revealed that the global model of job embeddedness predicted intentions to search, turnover intentions, as well as actual turnover behavior. Although the findings from this study confirmed the relationship between job embeddedness and turnover found in other research (Mitchell et al., 2001), the findings revealed that employees exhibiting high levels of job embeddedness and job satisfaction conducted fewer job searches.

Halbesleben and Wheeler (2008) examined work engagement and job embeddedness in a repeated measures study of 587 employees. Engagement referred to an employee's positive psychological state towards work. The researchers recognized that a number of studies on work engagement and job embeddedness suggested that the two constructs related positively to employee retention and job performance. Previous studies suggested that the two constructs were distinct. Despite the suggestions of these studies, empirical evidence of their independent relationship did not exist.

Further, the researchers reasoned that work engagement and job embeddedness shared common characteristics. Despite these commonalities, the two constructs had properties that distinctly differed. On one hand, the nature of the work facilitated work engagement. Thereby, work engagement ported to other organizations, when the employees moved, because the nature of work remained the same, and therefore, the work engagement would continue. In contrast, job embeddedness was more temporal in nature, due to its attachments to specific organizations and communities. Although, job embeddedness developed over time, the temporal nature resulted from its lack of transferability. With job embeddedness, employees would sever their attachments to their organizations and communities when they changed employers or locations (Mitchell et al., 2001). As such, Halbesleben and Wheeler (2008) sought to determine the independence of these two constructs, as well as, to determine the constructs ability to predict turnover intentions.

For the study, the researchers only considered the organizational aspects of the job embeddedness construct. Prior research used both constructs to measure employees' attachment to their jobs. The researchers reasoned that the constructs evolved from different research areas and resulted from different resource bases. As such, the researchers aimed to establish the two constructs as unique variables in explaining employee attachment.

This repeated measures study involved 587 workers employed in the United States. In the first phase, the participants responded to a survey that captured data about their job embeddedness and work engagement. In the second phase, the researchers administered a questionnaire to the participants from phase one, their supervisors, and the participants' closest co-worker. This questionnaire collected data regarding the participants' job performance and turnover intentions. In prior

research, job embeddedness predicted retention and job performance beyond that of job satisfaction and organizational commitment (Lee et al., 2004; Mitchell et al., 2001). As such, the researchers controlled for job satisfaction, organizational commitment, and other demographic variables, such as age and gender.

Based on the findings, the researchers concluded that job embeddedness and engagement were distinct constructs. Both job embeddedness and work engagement shared unique variance with job performance. However, only job embeddedness predicted turnover intentions beyond job satisfaction and organizational commitment. This study added to JE research by empirically showing job embeddedness as a distinct construct from work engagement.

Job Embeddedness in the Public Sector

The JE research on public institutions concentrated primarily on government agencies (Dawley & Andrews, 2012; Holmes, Chapman, & Baghurst, 2013; Young, Stone, Aliaga, & Shuck, 2013) and the military (Smith, Holtom, & Mitchell, 2011). In one study, JE was explored among staff employees at a public university (Swider, Boswell, & Zimmerman, 2011). Additionally, one study compared the job embeddedness between employees working for public and private organizations (Jiang, Liu, McKay, Lee, & Mitchell, 2012).

Swider et al. (2011) postulated that job embeddedness moderated the relationship between job search and turnover. The researchers reasoned that sacrifice-to-organization considered the employees' costs of severing ties to their organizations. Additionally, this sacrifice-to-organization was similar to the cost of quitting theorized with Mobley's (1982) cost of quitting. In Mobley's (1982) construct, cost of quitting reflected the employee's deliberations on the utility of their current employment in comparison to external job opportunities. As such, the researchers surmised that highly embedded employees would consider external

job opportunities that provided advantages beyond those offered by their current employers. On the other hand, less embedded employees would change jobs more readily due to having fewer attachments to their existing organization. This embeddedness would affect the capacity of these employees' job searches that could potentially lead them actually leave their current employer.

The researchers set out to examine the role of job search in the turnover process by assessing the moderating roles of job satisfaction, job embeddedness, and perceived job alternatives. The researcher operationalized job search as the activities individuals engaged in to find out job opportunities outside of their organizations. These activities comprised searching for jobs, transmitting resumes, and attending job interviews. Job satisfaction referred to the individuals' psychological reactions to their jobs. Perceived job alternatives involved individuals' perceptions on available job opportunities. The researchers reasoned that individuals with high level of embeddedness would be less likely to leave their employer, despite finding job opportunities through their job search efforts.

The study involved 895 staff employees of a large university located in the southwestern United States. A survey instrument consisting of Likert scale items was used to collect data on job search, job embeddedness, and satisfaction. Using a number of sources, such as job skills databases and job descriptions, the researchers developed the available alternatives based on the participants' occupations. The voluntary turnover data was collected from organizational records for an 18-month period. The organizational records indicated whether the individuals left for voluntarily, involuntarily, or for other reasons. In their study, the researchers controlled for age, ethnicity, and salary.

The findings revealed that job embeddedness moderated the effects of job search on turnover. The results showed that the relationship between job search

and turnover was stronger among employees with low levels of job embeddedness. This finding suggested that less embedded employees, who were searching for alternative job opportunities, were more likely to leave their employers. Conversely employees with high levels of job embeddedness would need very favorable job offers to counterbalance the costs associated with leaving their employer.

Additionally, the findings showed that job satisfaction moderated the effects of job search on turnover. The results showed the relationship between job satisfaction and turnover was stronger among employees with lower levels of job satisfaction. This finding suggested that employees with higher level of job search and low job satisfaction were more likely to turnover as compared to employees with lower levels of job search and higher levels of job satisfaction.

Lastly, the findings revealed perceived job alternatives moderated the influence of job search on turnover. The results showed that the relationship between perceived job alternatives and turnover was stronger among employees with greater availability of job alternatives. This finding suggested that employees with greater availability of job opportunities amplified the likelihood that the employees would quit voluntarily.

Off-the job embeddedness not only predicts turnover among employees, but has the ability to moderate turnover intentions. Dawley and Andrews (2012) reasoned that prior research on job embeddedness and its dimensions, on- and off-the job, were unclear in the exact association of on- and off-the job embeddedness and turnover intentions. To elucidate this association, Dawley and Andrews (2012) conducted a study with the aim of providing empirical evidence of the predictive validity of both on- and off-the job embeddedness on turnover intentions. More importantly, the researchers hypothesized that off-the job

embeddedness was not a predictor of turnover intention, but acted as a moderator between job embeddedness and turnover intentions.

To test their hypotheses, the researchers conducted a quantitative study using two separate samples. The first sample consisted of 1,189 white-collar government employees from an agency located in the eastern United States. The second sample involved 346 full-time nurses at a hospital in the same geographical region. The participants responded to a 37-item, Likert scale survey. The turnover intentions were measured using 3-items on this survey. The remaining items collected data regarding the participants' job embeddedness. The researchers used a three-step hierarchical regression analysis to analyze the survey data.

The analysis suggested four findings. First, on-the job embeddedness related negatively to turnover intentions, when job satisfaction and affective commitment were controlled. Additionally, off-the job embeddedness related negatively to turnover intentions. In contrast to the on-the job embeddedness, the off-the job embeddedness revealed a weaker relationship with turnover intentions. On-the job embeddedness explained a major amount of the variance in predicting turnover intentions. In the first sample of government employees, on-the job embeddedness explained 92% of the variance and 88% with the second sample of hospital nurses. As such, on-the job embeddedness was a stronger predictor of turnover intentions as compared to off-the job embeddedness. Lastly, the study confirmed the researchers' hypothesis that off-the job embedded moderated the effects of job embeddedness and turnover intentions.

In summary, this study added to the body of research on job embeddedness by highlighting the moderating effects of the off-the job embeddedness. Additionally, the study elucidated the associations between on- and off-the job

embeddedness and turnover intentions. Furthermore, on-the job embeddedness is a stronger predictor of turnover intentions.

Based on field theory, job embeddedness espoused that the contextual forces surrounding individuals influence their decisions and behaviors. The interconnectedness between these contextual forces from their organization and community affected their retention and turnover. As such, the contextual forces from private and public organizations could potentially affect or moderate these individuals' job embeddedness on turnover and retention (Jiang et al., 2012).

According to Jiang et al. (2012), employees of public institutions typically emphasize intrinsic factors of their jobs, such as dedication to serving the public as compared to their counterparts in the private sector. As in the case of higher education, employees of colleges and universities would emphasize the intrinsic factors of promoting student achievement. This emphasis on intrinsic factors resulted in public employees being more inclined to place greater priority on the extent in which their personal values fit with their organizations (Jiang et al., 2012).

In a meta-analysis on the predictive qualities of job embeddedness, Jiang et al. (2012) analyzed close to 43,000 articles on job embeddedness. In the analysis, the researchers hypothesized that organizational type would moderate the negative relationships of on- and off-the job embeddedness on turnover intentions and turnover. Further, their hypothesis posited that the two dimensions would be more negative for public organizations as compared to private organizations.

The meta-analysis yielded three key findings. First, on- and off-the job embeddedness explicated, "Incremental variance in both turnover intentions and actual turnover beyond commonly studied work attitudes and job alternatives" (p. 1082). This finding indicated that job embeddedness could predict turnover

intention and actual turnover behavior. Second, the post hoc analysis revealed that in specific contexts, "job embeddedness is more predictive of turnover criteria" (p. 1084). For public institutions, job embeddedness explained more of the variance in turnover intentions and actual turnover among these public employees. Third, the findings supported prior research on the role of job embeddedness in turnover intentions. The finding indicated that decreases in the on- and off-the job embeddedness of employees led to increased turnover intentions among these employees.

In a study of government employees, Young et al. (2013) examined the retention among extension agents in two states using job embeddedness as a lens. Extension agents are government employees, who assist farmers in rural areas with farm and home economics. The researchers sought to determine if differences existed between the extension agents in different states. Additionally, the researchers aimed to determine if job embeddedness could predict unique variance in the agents' intent to stay and discretionary effort.

The researchers surveyed 631 extension agents in two states. The survey instrument collected data on the agents' job embeddedness, intent to stay, discretionary effort, job satisfaction, organization commitment, employee engagement, and demographic information.

In terms of differences between the extension agents in two states, the study indicated that the results differed significantly between the two groups. The areas were the responses varied dealt with the extension agents' links-to-organization and fit-to-community. This finding supported the role of community in the job embeddedness construct. Both groups of agents showed consistently high means for sacrifice-to-community.

In terms of the predictive ability of job embeddedness, the study showed that the extension agents felt they fit well with their employers. This finding reflected the high retention rates among the extension agents. Despite the high retention rates, the findings revealed that their intent to stay was low. This finding suggested that in better economic times the extension agents would be more likely to leave their employer, despite their fit with their organization. More importantly, this finding revealed that the high retention rate among the extension agents masked their intent to leave.

Additionally, the organization-sacrifice dimension showed the highest predictive ability on intent to stay. The organization-sacrifice dimension considered what the agents would give up if they left their employer. For the extension agents, the costs of leaving their community was a greater sacrifice than the costs associated with leaving their employer. Average salaries for extension agents are lower than the national average, which potentially led to the findings that salaries and promotion were comparatively low.   In summary, this study supported the job embeddedness research on the influences of fit-to-community and links-to-organization on retention and intent to leave. Governmental salaries that are lower than the national average can affect employees' perception of sacrifice-to-organization. Moreover, the findings brought to light that high retention rates could mask turnover intentions of employees.

The research in this literature review has focused primarily on quantitative studies on job embeddedness. However, qualitative studies provide contextual data about job embeddedness based on individuals' the lived experiences. Holmes et al. (2013) conducted a qualitative phenomenological study. Their purpose was to understand the reasons human resources (HR) practitioners chose to remain with their employer by examining their perceptions and lived experiences. The

researchers reasoned that quantitative analysis would preclude the exploration of a central theme. Further, the researchers reasoned that the qualitative analysis afforded the ability to arrive at a deeper understanding of the role of job embeddedness in the decision process for remaining with an organization. Their study focused on the organizational aspect of job embeddedness, on-the job embeddedness.

The study involved 18 human resource practitioners, who worked for a governmental agency. Additionally, these participants had three years or more tenure with their organization. Holmes et al. (2013) conducted either face-to-face or telephonic interviews with the participants. The interviews were semi-structured in nature and took place for 20 to 50 minutes. The interview protocol included open-ended questions, such as "What made you stay with the organization up to this point?" and "Is there anything that would make you leave" (p. 805)?

The findings from study confirmed prior quantitative research and highlighted insights into the retention decision process. The data analysis yielded five themes. In the first theme, "HR practitioners' leading roles" (p. 807), the participants' articulated their perceptions of their roles and responsibilities as HR professionals. The majority (83%) felt their roles evolved around recruiting, staffing, and classifying employees. The other comments reflected on their roles as consultants and benefits and compensation advisors. Their comments suggested high embeddedness as to their compatibility with the organization (fit-to-organization) and attachments to the organization (links-to-organization).

The second theme, "HR practitioners' tenure in federal government" (p. 807), the participants provided information on their tenure with the organization. Half of the participants (50%) had worked between 21 to 30 years (39%) and 15 to

20 years (11%), with the remaining participants working for the organization 14 years or less. This longevity with their organization related to sacrifice-to-organization in that the participants, who give up a substantial amount of tenure if they left the organization.

The third theme, "Why people stay" (p. 807), the participants responded to why they remained with their organization. Their responses aligned with all three dimensions of on-the job embeddedness. The top two reasons were career advancement (72%) and value of their work in HR (56%). These reasons suggested high embeddedness with the employees feeling compatibility between their personal requirements and the organization or fit-to-organization. Responses related to sacrifice-to-organization included job security and location. Comments related to good leadership aligned with the links-to-organization.

For the fourth theme, "Improvements to reduce turnover" (p. 807), the participants expressed areas within the organization that needed changing or improving. Of the respondents, 61% articulated training and mentoring (61%), leadership (28%), and communication (22%) as areas of concern. The comments suggested that the management needed more training in employee relations and the employees needed mentoring opportunities. These responses suggested low job embeddedness for the fit-to-organization, as well as, the links-to-organization. The leadership and communication concerns aligned with the links-to-organization.

The last theme, "Perceptions precipitating leaving" (p. 807), the participants identified factors that would cause them to leave their employer. The majority (78%) of the participants responded that they were not thinking about leaving their employer. This response suggested high embeddedness for the employees for all three dimension of on-the job embeddedness. However, 35% of

the participants indicated that they had considered quitting. For these participants, the factors related to work-family conflict, job location, leadership, respect for their role, and hiring shortages. These factors suggested low embeddedness with fit-to-community, links-to-organization, and sacrifice-organization. This low embeddedness potentially could lead to job searching, an antecedent to turnover, and ultimately turnover.

In summary, this study provided qualitative evidence of the predictive capabilities of job embeddedness on turnover intentions. The HR practitioners felt their job embeddedness depended on good leadership for building connections to their organization and identification with their role for reinforcing the compatibility between their personal needs and their organization. Other factors that contributed to their retention were their tenure, job security, and job location. On the other hand, work-family conflicts, job location, leadership, respect for their role, and hiring shortages contributed to their low embeddedness with fit-to-community, links-to-organization, and sacrifice-to-organization. This low embeddedness potentially could lead to job searching, an antecedent to turnover, and ultimately turnover More importantly, this study illustrated the role of HR policies in building job embeddedness and retaining employees.

Smith et al. (2011) sought to determine if organizational commitment and job embeddedness could predict the voluntary turnover of military personnel. Military personnel could leave the military by not reenlisting or retiring after 20 years of service. The researchers reasoned that off-the job embeddedness influenced the military personnel's decision to reenlist and that on-the job embeddedness affected their decision to retire.

Their study involved surveying members of the United States Air Force. Their sample based on random stratified sampling consisted of 2,501 members.

The survey collected the participants' personal characteristics and their perceptions on job satisfaction, job alternatives, organizational commitment, and job embeddedness. Additionally, the researchers used voluntary turnover data provided by the Air Force.

Their analysis revealed that several findings regarding the role of job embeddedness in the participants' decision to reenlist and retire. For reenlistment, on-the job embeddedness related negatively and significantly to the reenlistment decision. This finding suggested that the greater the on-the job embeddedness the more likely the participants would reenlist. Off-the job embeddedness related positively and significantly to the reenlistment decision. This finding suggested that the greater the off-the job embeddedness the less likely the participants would reenlist. Another finding indicated that on-the job embeddedness not only predicted a significant amount of the variance in the reenlistment decision, but on-the job embeddedness was a stronger predictor of reenlisting than off-the job embeddedness.

For retiring, on-the job embeddedness related negatively and significantly to the retirement decision. This finding suggested that the greater the on-the job embeddedness the more likely the participant would postpone retirement. Off-the job embeddedness related positively and significantly to the retirement decision. This finding implied that the greater the off-the job embeddedness the more likely the participants would retire. Lastly, on-the job and off-the job embeddedness explained a significant amount of the variance in the retirement decision. However, on-the job embeddedness was a stronger predictor than off-the job embeddedness.

Prior job embeddedness research showed that on-the job embeddedness was a stronger predictor of intentions to stay (Dawley & Andrews, 2012; Jiang et

al., 2012). In the study by Dawley and Andrews (2012), their findings indicated that off-the job embeddedness moderated the effects of on-the job embeddedness on intentions to stay. The researchers reasoned that employees exhibiting high levels of off-the job embeddedness resulted in their on-the job embeddedness having a lesser effect on their intentions to stay.

Job Embeddedness and IT Professionals

IT professionals were the foci of job embeddedness research in private and public settings. In private settings, job embeddedness research involved IT professionals employed at call centers in the US and India (Ramesh & Gelfand, 2010) and at organizations that provided medical and IT services in the United States (Van Dyk, Coetzee, & Takawira, 2013). In public settings, job embeddedness research concentrated on IT professionals working for government agencies, such as the Veterans Administration (Zhang, Ryan, Prybutok, & Kappelman, 2012).

Ramesh and Gelfand (2010) reasoned that collectivistic and individualistic cultures varied on several factors that would affect the job embeddedness of employees. For example, in collectivistic cultures, employees would emphasize the need to fulfill their duty and obligations. In contrast, individualistic cultures would emphasize developing one's personal potential. As such, Ramesh and Gelfand (2010) set out to determine job embeddedness in the United States and India. United States is considered as an individualistic culture, whereas India is known for its collectivism (Ramesh & Gelfand, 2010). The researchers had four purposes in mind with their study. First, the researchers sought to determine if job embeddedness differed between these countries. Second, the researchers aimed to determine whether job embeddedness could predict voluntary turnover in collectivistic cultures. Third, the researchers attempted to determine if the job

embeddedness model captured all the influences on voluntary turnover. Lastly, Ramesh and Gelfand (2010) desired to expand the job embeddedness model to include family embeddedness.

Prior turnover research suggested that family played a critical role in the employees turnover (March & Simon, 1958; Mobley, 1982). As such, Ramesh and Gelfand (2010) developed the family embeddedness construct to represent the effects of family on voluntary turnover. The family embeddedness construct considered similar forces from community and the organization as used in job embeddedness. The resulting construct consisted of three dimensions: family-fit, family-links, and family-sacrifice. The family fit dimensions considered the "family perception of how well the organization fits the employee" (p. 811). The family-links dimension dealt with "how well family members are connected to the organization" (p. 811). The family-sacrifice dimension referred to "what the family would have to give up if they move" (p. 811).

The researchers conducted a cross-cultural study involving 797 call center employees located in the United States (323) and India (474). The researchers used a survey instrument to collect data regarding the participants' on- and off-the job embeddedness and family embeddedness. The researchers collected voluntary turnover data from the HR departments of the participants.

First, the findings suggested that job embeddedness was generalizable to non-western countries, such as India. The predictive validity of job embeddedness explained actual turnover in India, after controlling for job satisfaction, organizational commitment, job search, and job alternatives. The findings revealed that cultural differences existed between job embeddedness and turnover. Job fit was more predictive of turnover among U.S. employees as compared to employees of India. Further, the likelihood of turnover in India decreased as the

organization and community links increased. This finding suggested that organization and community links were more predictive of turnover for employees of India than for U.S. employees. Lastly, the findings indicated that family embeddedness could predict turnover in the United States and India, due to its ability to explain variances in turnover above general attitudes, on-the job embeddedness, and off-the job embeddedness.

Employing effective HR practices can facilitate the retention of employees. In the study by Allen (2006), socialization tactics increased the retention of new employees. However, organizations have other retentions factors that can facilitate the embedment of employees. Van Dyk et al. (2013) sought to examine the role of specific retention factors on the embeddedness of medical and IT employees. The researchers reasoned that these highly skilled employees represented intellectual capital that, if lost, could jeopardize the organization's competitive advantage and survival. The researchers believed that retention factors could serve as a buffer of shocks as described in the Unfolding Model of Turnover and as a facilitator of job embeddedness between the employees and the organization. As such, the researchers conducted a study that examined whether the satisfaction of medical and IT professionals with retention factors predicted their job embeddedness.

The study involved 206 participants, who were identified as possessing scarce skills. The participants worked as medical and IT professionals and managers for a medical and IT services company. The participants responded to a survey that collected their perceptions on retention factors and job embeddedness. The retention factors included compensation, job characteristics, training and development opportunities, supervisor support, career opportunities, and work-life balance. Compensation considered the employees' remuneration package including base salary, benefits, and incentives. The job characteristics looked at

specific aspects of their jobs, such as work variety, chances to engage in challenging and interesting tasks, co-worker relations, and autonomy. Training and development opportunities involved whether the employees were able to participate in these opportunities for growth and enlargement. Supervisor support considered the employees' perceptions on showed value and care for their employees. Career opportunities referred to internal and external opportunities for advancement and promotion. Work-life balance dealt with the employees' perception of satisfaction with the balance between their work and personal life. The job embeddedness measured the employees' perceptions on their on- and off-the job embeddedness.

Overall, the findings showed that the participants were satisfied with their training and development opportunities, career opportunities, and job characteristics. The participants' satisfaction with these three factors positively predicted their perception with the job embeddedness dimensions: fit-to-organization and sacrifice-to-organization. The major contributor to the prediction of fit-to-organization was the retention factor, training and development opportunities. Additionally, the participants' satisfaction with the support from their supervisors predicted their fit-to-organization. Lastly, satisfaction with career opportunities predicted sacrifice-to-organization.

Sacrifice-to-organization considered what the employees would give up, if they left their employer. Highly embedded employees were more likely to stay with their employers because they perceive the costs of severing ties with their employer were too great. For the participants in this study, the highly embedded employees were more likely to stay, due to their satisfaction with their promotional and advancement opportunities and their remuneration, such as retirement benefits, compensation, and longevity.

Another finding related to sacrifice-to-organization dealt with the participants' perception of training and development opportunities. The training and development opportunities afforded employees opportunities for professional development, job-specific training, as well as, chances to apply newly acquired skills in their work. The highly embedded participants' were more likely to stay, due to their satisfaction with their opportunities to grow and develop new skills. This finding suggested that embedded medical and IT professionals favored opportunities for training and development over other retention factors. This finding is consistent with other research on how workers in dynamic fields with constant change need to continually update their technical skills (Fu, 2010). Additionally, this finding was consistent with other research on the need for highly skilled employees to avoid professional obsolescence (Zhang et al., 2012).

Fit-to-organization considered the congruence of employees' personal requirement and their employer. Highly embedded employees were more likely to remain with their employers when the needs of their personal and work life were compatible. The findings suggested that highly embedded participants were more likely to stay, due to their satisfaction with the characteristics of their job, such as autonomy, flexibility, and opportunities to work on challenging and interesting tasks.

Another finding suggested that supervisor support positively influenced the participant's perceptions on fit-to-organization. The participants indicated their satisfaction with feeling that their supervisors valued their work, supported their ideas, provided feedback regarding their work, and recognized them for jobs performed well. This finding suggested that the more satisfied the participants were the more embedded they were and they felt congruence between the organization and themselves.

In summary, this study added to the JE research by providing empirical evidence of specific retention factors that facilitate job embeddedness among employees, especially medical and IT employees, who possessed scarce skills. The findings suggested that four retentions factor increased on-the job embeddedness for fit-to-organization and sacrifice-to-organization. The four retention factors were training and development opportunities, career advancement opportunities, supervisor support, and job characteristics. Additionally, this study provided insights into the challenges of retaining highly skilled and talented workers, such as medical and IT professionals.

In pursuit of other factors that may explain why IT professionals remain with their employers, despite being dissatisfied with their jobs, Zhang et al. (2012) sought to expand the on-the job embeddedness construct to include technical skill currency. The researchers argued that professional obsolescence might influence job embeddedness and directly affect turnover of IT workers. The researcher reasoned that IT professionals worked in dynamic environments where the technology changed constantly. The constant change led the IT worker's core competencies eroding quickly. Further, the researchers asserted that demands for skill currency for IT workers differed greatly from skill currency of other professions. According to Standridge and Autrey (2001), maintaining technical skills was essential for IT workers as opposed to most employees in the world of business. To support their assertions, the researchers conducted a study to extend the job embeddedness theory to include perceived skill obsolescence, to test the relationships between perceived skill obsolescence and turnover intention, and to explore the predictive validity of the expanded model of job embeddedness.

The study involved 1,777 IT professionals working for the Veterans Administration. The researchers administered a survey that collected data

regarding the participants' turnover intention, job satisfaction, perceived job alternatives, perceived professional obsolescence, and on-the job embeddedness.

The study resulted in several findings. First, the findings confirmed the predictive validity of the job embeddedness theory and the generalizability of the theory to other professionals, such as IT professionals. Second, the findings confirmed the researcher hypothesis that age moderated the effect of professional obsolescence in decreasing job embeddedness.

Third, perceived obsolescence related significantly to two of the three dimensions of job embeddedness, namely fit-to-organization and sacrifice-to-organization. In regards to fit-to-organization, the researchers asserted that the currency of the IT professionals' skills influenced their perception of their compatibility with their organization. Based on this finding, Zhang et al. (2012) posited that IT professionals fit-to-organization depended on the technical orientation of their jobs and the skills possessed by the IT professionals. For sacrifice-to-organization, the influence of perceived obsolescence on embeddedness reflected the IT professionals' perception on the costs of leaving their organization. This finding suggested that low embeddedness could occur from the lower probability for merit raises and promotional opportunities resulting from the IT workers' professional obsolescence. As such, the low embeddedness would lead to turnover due to decreased costs for leaving.

Additionally, the finding supported the researchers' hypothesis that sacrifice-to-organization mediated the relationship between perceived obsolescence and turnover intention. However, the path where fit mediated the relationship between perceived obsolescence and turnover intention was not related significantly with the inclusion of job satisfaction and job alternatives. The

researchers speculated that this finding indicated the complexity of this multivariate model.

In summary, this study added to the body of research on job embeddedness, turnover intentions, and on IT professionals. Further, this study confirmed the predictive validity and generalizability of the on-the job embeddedness construct. Lastly, this study expanded the job embeddedness theory to include perceived skill currency. As a result, the study findings revealed the moderating effect of age on professional obsolescence and turnover intentions and the mediating effects of sacrifice-to-organization between perceived skill currency and turnover intentions.

Socialization Tactics

Many organizations rely on human resource strategies, such as socialization tactics, to retain new and existing employees. Socialization tactics refer to the on-boarding practices used by organizations to acclimate new employees to the organization (Allen, 2006). The on-boarding practices facilitate the reduction of anxiety and uncertainty associated with entering a new organization. The main intent of socialization tactics is not only to acclimate newcomer, but to encourage the newcomers to remain members of the organization that participate and find their place in the organization (Allen, 2006). Successful socialization tactics embedded new employees making them less likely to quit voluntarily (Allen, 2006). In relationship to job embeddedness, socialization tactics had the ability to develop better fits between the employee and the organization, to cultivate links between the organization and the employee, as well as to foster positive aspects of the organization that the employee would make severing ties to the organization more difficult.

Socialization tactics and job embeddedness were the focus of a study conducted by Allen (2006). The study explored the on-the-job embeddedness

among new employees working for a large financial institution. The researcher proposed that socialization tactics led to higher levels of embeddedness for new employees and thus reduced new employee turnover. As such, the study sought to determine the relationship between socialization and newcomer turnover, to determine if job embeddedness partially mediated the relationship between socialization and newcomer turnover, to determine the relationship between socialization tactics and job embeddedness, and to determine if socializations tactics related more strongly to on-the job embeddedness than to off-the job embeddedness.

The study involved 222 employees working for a large financial services organization. These employees had worked for the organization for less than 12 months at the data collection took place. The researchers electronically administered surveys to the participants. The survey, consisting of Likert-scale items, collected data regarding the participants' socialization tactics and job embeddedness perceptions. Turnover data was collected using organization records, which were coded as voluntary or involuntary separations.

The socialization tactics consisted of six dimensions: collective, formal, sequential, fixed, serial, and investiture. Collective socialization tactics involved using groups or cohorts for new employees to experience common learning experiences. Formal socialization tactics used defined activities, such as training sessions, to assist new employees with learning their new roles. Sequential tactics required giving new employees specific information about the order in which their learning active and experiences would occur. Fixed tactics involved explaining to the new employees about the completion durations for each phase of their socialization. Serial tactics referred to organizations using experienced employees as mentors and role models. Lastly, investiture tactics referred to allowing

experienced employees to provide positive social support that builds confidence and competence in new employees. The on-the-job embeddedness referred to the employees' fit-to-organization, links-to-organization, and organizational-related sacrifice.

The findings revealed that all six dimensions of socialization tactics correlated positively and significantly with on-the-job embeddedness. Only the serial and investiture dimensions of socialization tactics related significantly and negatively to new employee turnover. This finding suggested that as serial and investiture socialization tactics increased the probability of a new employee quitting voluntarily decreased. In terms of the mediating effects, on-the job embeddedness partially mediated the effects of investiture socialization tactics on newcomer turnover. Collective, investiture, and fixed socialization tactics related more strongly to on-the job embeddedness than to off-the job embeddedness. Additionally, the findings showed that that on-the-job embeddedness correlated negatively and significantly with turnover. This finding confirmed previous research regarding on-the-job embeddedness reduction of turnover in employees, especially for new comers.

In summary, the retention of new financial services employees depends upon the HR and management strategies the organizations used. The use of experienced employees as mentors and role models (serial socialization tactic) and as positive social support for building confidence and competence (investiture socialization tactic) increased the likeliness of retaining these individuals. More importantly, this study provided empirical evidence of the positive effects of HR practices on the retention of new employees (Allen, 2006).

Summary

For decades, researchers have studied retention among employees. These studies have considered the reasons why employees leave and why they remain. Early research on these phenomena focused on turnover behavior using traditional turnover models, such as the Organization Equilibrium Theory (March & Simon, 1958), Met Expectations Theory (Porter & Steers, 1973), the Linkages Model (Mobley, 1977), and other related constructs. Underlying these traditional turnover models have been March and Simon's (1958) model, which espoused that employees left their employers based on proximal factors. These proximal factors included desirability of movement, such as job satisfaction and organizational commitment, and ease of movement, such as perceived job alternatives. Each traditional turnover model sought to explain the variance in the effects of antecedents on actual turnover behavior.

Recent models of turnover endeavored to find alternative explanations for employee retention and turnover. In the Unfolding Model of Turnover, the researchers posited that employees experienced shocks, which led to subsequent deliberations. In some cases, these deliberations led to pre-scripted behaviors, such as quitting. In other cases, the employees engaged in job searching and alternative comparisons, which led to the employees staying or leaving. The Unfolding Model of Turnover offered new insights into employee turnover decisions and behavior and provided a new direction for turnover literature.

In a novel approach, Mitchell et al. (2001), sought to view turnover behavior from the retention perspective. To this end, the researchers proposed the job embeddedness model. This model focused on the forces that kept employees attached to their organizations and community. Additionally, this model

71

recognized that non-work factors could play a role in the employees' decisions for staying with their employer.

Subsequent research on job embeddedness has shown that job embeddedness predicted intentions to quit and turnover above and beyond proximal factors, such as job satisfaction, organizational commitment, and perceived job alternatives (Crossley et al., 2007; Halbesleben & Wheeler, 2008; Holtom & O'Neill, 2004; Jiang et al., 2012). Job embeddedness was generalizable to other cultures (Ramesh & Gelfand, 2010) and professions (Allen, 2006; Holtom & O'Neill, 2004; Mitchell et al., 2001). In public (Holmes et al., 2013; Smith et al., 2011; Young et al., 2013) and private sectors (Lee et al., 2004), job embeddedness has predicted the turnover intentions and turnover behavior. In one study, job embeddedness showed that effects of job search and turnover among employees in higher education (Swider et al., 2011). Dawley and Andrews (2012) showed how on- and off-the job embeddedness varied between workers in a hospital and government agency. In the job embeddedness research on IT professionals, Zhang et al. (2012) showed the relationship between job embeddedness and perceived skill currency among IT professionals, as well as, the predictive validity of the job embeddedness. In another study involving IT professionals, Van Dyk et al. (2013) provided empirical evidence of the retention factors that facilitate job embeddedness among IT and medical professionals. Additionally, this study provided insights into the challenges of retaining highly skilled workers. Based on these studies, job embeddedness holds promise for explicating the reasons employees remain with their organization. In Table 3, the research on Job Embeddedness is summarized.

Table 3

Summary of Job Embeddedness Research

Author	Constructs	Sample	Findings
Allen (2006)	JE and socialization tactics	222 employees working for a large financial services organization	• Serial and investiture socialization tactics related significantly and negatively to new employee turnover. • On-the job embeddedness partially mediated the effects of investiture socialization tactics on newcomer turnover. • Collective, investiture, and fixed socialization tactics related more strongly to on-the job embeddedness than to off-the job embeddedness. • On-the-job embeddedness correlated negatively and significantly with turnover.
Crossley et al. (2007)	Global model of JE	306 employees from a medium-sized organization in mid-western U.S.	• The global model of job embeddedness predicted intentions to search, turnover intentions, as well as actual turnover behavior. • Employees exhibiting high levels of job embeddedness and job satisfaction conducted fewer job searches.
Dawley and Andrews (2012)	JE and turnover intention	1,189 government agency employees and 346 nurses at a hospital in eastern U.S.	• On-the job embeddedness related negatively to turnover intentions, when job satisfaction and affective commitment were controlled. • On-the job embeddedness explained a major amount of the variance in predicting turnover intentions. • In the first sample of government employees, on-the job embeddedness explained 92% of the variance and 88% with the second sample of hospital nurses • On-the job embeddedness was a stronger predictor of turnover intentions as compared to off-the job embeddedness. . • Off-the job embeddedness related negatively to turnover intentions. • Off-the job embeddedness revealed a weaker relationship with turnover intentions. • Off-the job embedded moderated the effects of job embeddedness and turnover intentions.

Table 3 (cont.)

Author	Constructs	Sample	Findings
Halbesleben and Wheeler (2008)	JE and work engagement	587 workers employed in the U.S.	• Showed job embeddedness and work engagement were distinct constructs. • Both job embeddedness and work engagement shared unique variance with job performance. • Only job embeddedness predicted turnover intentions beyond job satisfaction and organizational commitment.
Holmes et al. (2013)	JE	18 HR practitioners at a government organization	• Provided qualitative evidence of the predictive capabilities of on-the job embeddedness on turnover intentions based on a qualitative phenomenological approach • HR practitioners felt their job embeddedness depended on good leadership for building connections to their organization and identification with their role for reinforcing the compatibility between their personal needs and their organization. • Tenure, job security, and job location contributed to their on-the job embeddedness • Work-family conflicts, job location, leadership, respect for their role, and hiring shortages contributed to their low embeddedness with fit-to-community, links-to-organization, and sacrifice-to-organization. • Low embeddedness potentially could lead to job searching, an antecedent to turnover, and ultimately turnover • Illustrated the role of HR policies in building job embeddedness and retaining employees
Holtom and O'Neill (2004)	JE	208 employees working at a community-based hospital in the U.S.	• Job embeddedness correlated negatively with the participants' intentions to leave and to quit. • Embedded employees were less likely to leave or quit. • Job embeddedness predicted turnover beyond proximal predictors, such as job satisfaction, organizational commitment, job search, and perceived job alternatives. • Job embeddedness of hospital workers predicted voluntary turnover better, even after controlling for proximal factors. • Factors influencing retention differed between nurses and other healthcare workers. For nurses, the links-to-community was more prominent.

Table 3 (cont.)

Author	Constructs	Sample	Findings
Jiang et al. (2012)	JE	Meta-analysis of 43,000 articles on JE	- On- and off-the job embeddedness explained more of the variance in both turnover intentions and turnover behavior beyond proximal factors - Job embeddedness could predict turnover intention and actual turnover behavior. - Job embeddedness was more predictive of turnover criteria in specific contexts. - Job embeddedness explained more of the variance in turnover intentions and actual turnover among these employees in the public sector. - Job embedded influenced the turnover intentions of employees. - Decreases in the on- and off-the job embeddedness of employees led to increased turnover intentions among these employees.
Lee et al. (2004)	JE, organizational citizenship behavior, job performance, and absenteeism	829 employees of a large, international financial institution	- Both on- and off-the job embeddedness increased the negative effects of citizenship behaviors on turnover. - On-the job embeddedness increased the positive effects of absenteeism and job performance on turnover and predicted organizational citizen behavior and job performance. - Off-the job embeddedness predicted voluntary turnover and absenteeism.
Mitchell et al. (2001)	JE, job satisfaction, organizational commitment, turnover, job alternatives, and job search	177 grocery store workers and 208 hospital workers	- Introduced job embeddedness theory - Discovered a negative relationship between embeddedness in the organization and intentions to leave - Discovered a negative relationship between embeddedness and actual turnover behavior - Job embeddedness predicted voluntary turnover beyond that of job satisfaction and organizational commitment - Job embeddedness improved the prediction of turnover above and beyond perceived job alternatives and job search as predictors of voluntary turnover - Job embeddedness improved the prediction of turnover behavior, in addition to the prediction achieved by job satisfaction and organizational commitment

Table 3 (cont.)

Author	Constructs	Sample	Findings
Ramesh and Gelfand (2010)	JE and family embeddedness	797 call center employees in U.S. and India	• JE was generalizable to non-western countries, such as India. • The predictive validity of job embeddedness explained actual turnover in India. • Job fit was more predictive of turnover among U.S. employees as compared to employees of India. • Organization and community links were more predictive of turnover for employees of India than for U.S. employees. • The predictive validity of family embeddedness could predict turnover in the United States and India.
Smith et al. (2011)	JE and organizational commitment	2,501 member of the U.S. Air Force	• On-the job embeddedness was a stronger predictor of intentions to stay • Off-the job embeddedness predicted intentions to stay • Members with greater levels of on-the job embeddedness were more likely to reenlist and to postpone retirement • Members with greater levels of off-the job embeddedness were more likely to separate or retire from the military
Swider et al (2011)	JE, job search, job satisfaction, job alternatives, and turnover	895 staff employees working a large university in southwestern U.S.	• JE moderated job search on turnover • The relationship between job search and turnover was stronger among employees with low levels of job embeddedness. • Less embedded employees, who were searching for alternative job opportunities, were more likely to leave their employers. • Conversely employees with high levels of job embeddedness would need very favorable job offers to counterbalance the costs associated with leaving their employer. • Job satisfaction moderated the effects of job search on turnover. • The relationship between job satisfaction and turnover was stronger among employees with lower levels of job satisfaction. • Employees with higher level of job search and low job satisfaction were more likely to turnover as compared

Table 3 (cont.)

Author	Constructs	Sample	Findings
			• to employees with lower levels of job search and higher levels of job satisfaction. • Perceived job alternatives moderated the influence of job search on turnover. • The relationship between perceived job alternatives and turnover was stronger among employees with greater availability of job alternatives. • Employees with greater availability of job opportunities amplified the likelihood that the employees would quit voluntarily.
Van Dyk et al. (2013)	JE, retention factors	206 medical and IT professionals and managers for a medical and IT services company	• Empirical evidence of specific retention factors that facilitate job embeddedness among medical and IT employees, who possessed scarce skills • Retention factors, such as training and development opportunities, career advancement opportunities, supervisor support, and job characteristics increased on-the job embeddedness for fit-to-organization and sacrifice-to-organization • Provided insights into the challenges of retaining highly skilled and talented workers, such as medical and IT professionals
Young et al. (2013)	JE, intent to stay, discretionary effort, job satisfaction, organization commitment, and employee engagement	631 extension agents in two states	• Supported the fit to community and links to organization dimensions of JE as determinants of retention of governmental employees
Zhang et al. (2012)	JE, technical skill currency	1,777 IT professionals working for the Veterans Administration in the U.S.	• Confirmed the predictive validity and generalizability of the on-the job embeddedness construct • Expanded the job embeddedness theory to include perceived skill currency • JE moderated age on professional obsolescence and turnover intentions • JE mediated sacrifice-to-organization between perceived skill currency and turnover intentions

CHAPTER 3: METHODOLOGY

Chapter 3 focuses on the methodology the researcher used to study job embeddedness and retention among employees in public higher education, with special emphasis on IT professionals. This section presents the purpose of the study, research design, participants, instrumentation, pilot study, procedures, data analyses, and limitations. This section concludes with a summary of the methodology.

Purpose of the Study

This study sought to investigate the reasons employees in public higher education chose to remain with their employer based on their job embeddedness. To investigate this phenomenon, the researcher used an embedded mixed methods design. The primary purpose of this study was to determine if job embeddedness predicted the retention of public higher education employees. Prior research has shown job embeddedness to be a predictor of intentions to stay among employees in different industries (Reitz & Anderson, 2011). A secondary purpose of this study was to explore qualitatively the on-the and off-the job factors that facilitated or detracted from public higher education employees' job embeddedness. The qualitative data provided support for the primary purpose of the study by explaining the relationship between the employees' job embeddedness and intentions to stay. Additionally, this study aimed to determine whether the intentions to stay differed among information technology professionals and non-information technology professionals based on their job embeddedness.

Research Design

This study used a mixed method, sequential embedded design. This research design had two distinct phases: quantitative followed by qualitative

(Creswell & Plano Clark, 2007). In this design, the researcher began by collecting and analyzing quantitative data. In the second phase, the researcher collected qualitative data to explain and relate the results from the quantitative phase. With this design, the qualitative data was embedded within the correlational design to explain and relate the predictor and outcome variables (Creswell & Plano Clark, 2007).

The rationale for this design was that the two research methods built upon one another. The quantitative research method facilitated the systematic exploration, the generalizability, and replication of phenomena (Ary, Jacobs, & Sorensen, 2010). The qualitative research methods provided the ability to "derive understanding from the larger, complicated, multifaceted, social, and historical contexts within which people's lives unfold" (Bailey, 2006, p. 2). The qualitative aspect allowed the study to get a richer and contextual understanding of job embeddedness and the intentions to stay among higher education employees. Additionally, the qualitative data facilitated corroboration of the quantitative analysis. Furthermore, it facilitated extending the breadth and range of inquiry.

Research Questions

Three research questions guided the investigation of the job embeddedness and retention of public higher education employees. These questions sought to address the primary and secondary purposes of the study. As such, the following three research questions are as follows:

1. To what extent did job embeddedness influence the intentions to stay among employees of public higher education?

2. How did public higher education employees perceive their job embeddedness on intentions to stay?

3. To what extent did job embeddedness, its dimensions, and intentions to stay vary between IT professionals and non-IT professionals in public higher education?

Participants/Sample

With the mixed method sequential embedded design, the researcher used a different sample in the two different phases. In the quantitative phase of the study, the researcher recruited participants from the target population. The target population consisted of staff employees, who worked for the California State University (CSU) system. According to the Profile of CSU Employees: Fall 2013, the CSU employed 19,421 staff employees (California State University, 2013). Employees in staff positions worked in professional / technical occupations, office / administrative support, service occupations, and construction / maintenance / transportation occupations. Of the staff positions, professional / technical occupations (34.8%) represented the second largest occupational group. IT professionals fell within the professional / technical occupations (California State University, 2013). The participants, who were recruited, were administered an electronic survey.

The electronic survey invited the participants to continue their participation for the qualitative phase of the study. The researcher used random purposive sampling to select the participants, who chose to continue, for the second sample. The participants in the second sample participated in semi-structured interviews.

Participants' Rights and Ethical Considerations

The protection of human-subjects' right is imperative in any study. As part of this study, the researcher received approval from the Institutional Review Board at California State University, Fresno State prior to collecting any data. The

researcher adhered to all the recommended guidelines for human-subject research as outlined by the National Institutes of Health (NIH) Office of Extramural Research for protecting the rights and welfare of the participants in this study.

Prior to commencing the survey and interviews, the researcher advised the participants of their rights, of their ability to opt out of the process at any time, and of the protocols used to protect their anonymity and to maintain the confidentiality of their responses. The consent form discussed any known risks, voluntary nature, confidentiality, and human-subjects statement. A sample of the consent form that was included in the electronic survey is located in Appendix A. Additionally, the researcher sent the same consent form to the interview participants prior to the interviews with instructions for them to review it. Their verbal agreement was recorded with their permission.

Data Collection

Using the mixed method sequential embedded design, the researcher collected data in two different phases. In the first phase, the researcher collected quantitative data using an electronic survey instrument. The electronic survey (see Appendix B) contained the consent form and a digital equivalent of consent.

To distribute the survey, the researcher worked with the California State University Employees Union (CSUEU). The CSUEU represented CSU employees working in the health services support, operations, administrative support, technical support, and English Language Program instructors. The CSUEU distributed the electronic survey to staff employees, who worked for the California State University (CSU) system.

To gain support for the study recruitment, the researcher attended the CSUEU Board meeting in June 2014. With approval from the CSUEU Board of Directors, the 24 Chapter Presidents distributed the electronic survey to their

paying and non-paying members through email as a separate communication and as part of the July 2014 electronic newsletter. Additionally, the CSUEU Communications Manager placed a link to the electronic survey on the CSUEU Facebook page and website. The recruitment offered an incentive of a $100 gift certificate to Amazon, regardless of participation in the study. The recruitment was open from July 1 to August 31, 2014.

In the second phase, the researcher collected qualitative data from interviews. The researcher used the survey instrument to invite participants for the second phase. The survey instrument inquired as to their participants' willingness to participate in interviews. If the participants agreed, the electronic survey collected their names, email addresses, and telephone numbers. The researcher used random purposive sampling to select the sample for the interviews. Random purposeful sampling allowed the researcher to select randomly the participants, who could provide relevant information (Ary et al., 2010) about job embeddedness among employees in public higher education from the larger group (Ary et al., 2010). In doing so, the researcher could increase the credibility of the study (Ary et al., 2010). The interviews took place from late September to mid-October 2014.

Instrumentation

As mentioned above, the researcher used a mixed-methods sequential embedded design. This design required collecting data in two phases. As such, the researcher used a survey to collect the quantitative data in the first phase and an interview protocol to collect the quantitative data in the second phase.

Survey

The primary instrument used to collect data was an electronic survey. The survey was an adaptation of the survey instrument from the original study by

Mitchell et al. (2001). Prior to modifying the instrument, the researcher received permission from the authors. A copy of this permission is located in Appendix C. In modifying the survey instrument, the researcher removed two-items regarding the respondent's duration in their job and the length of time the respondents' worked for their employer. These items were removed due to their homogeneity with the demographic variable, length of employment (Allen, 2006). Additionally, the researcher tailored the wording of some items to reflect the population's university setting. After modification, the survey instrument consisted of 62-items measuring five scales: demographic characteristics, job embeddedness, job satisfaction, affective organizational commitment, and turnover intention.

Demographic characteristics. The survey instrument collected the demographic characteristics of the participants using 12-items. The questions inquired about the participants' employment location, role, gender, age, ethnicity, education level, zip code, union bargaining unit, length of employment, years of experience in the job position, years of experience in the and profession. The last question asked if the respondents worked as an IT professional.

Job embeddedness. Job embeddedness was measured using 37-items adapted from the original research by Mitchell et al. (2001). These items measured the respondents' job embeddedness using the construct's six dimensions: fit-to-organization, fit-to-community, links-to-organization, links-to-community, sacrifice-to-organization, and sacrifice-to-community. The questions included selections, fill-in-the-blanks, and Likert scaled items. For the Likert scaled items, the participants responded with their agreement to statements using a 5-point Likert scale, ranging from 1 indicating "Strong Agreement" and 5

indicating "Strong Disagreement." A sample statement from this scale was "My values are compatible with the university's values."

Job satisfaction. Job satisfaction was measured using 3-items from the study of Mitchell et al. (2001). The participants indicated their agreement using a 5-point Likert scale, ranging from 1 indicating "Strong Agreement" and 5 indicating "Strong Disagreement." A sample question from this scale was "In general, I like working here."

Affective organizational commitment. The researcher measured affective organizational commitment using 8-items adapted from Mitchell's et al. (2001) study. The participants indicated their agreement using a 5-point Likert scale, ranging from 1 indicating "Strong Agreement" and 5 indicating "Strong Disagreement." A sample question from this scale is "I really feel as if this organization's problems are my own."

Turnover intention. Lastly, the researcher collected data regarding the participants' intentions to leave their employer. The researcher measured the turnover intention using 2-items from the study of Hom, Griffeth, and Sellaro (1984). The participants indicated their agreement using a 5-point Likert scale, ranging from 1 indicating "Strong Agreement" and 5 indicating "Strong Disagreement." A sample question from this scale is "I intend to leave my organization within the next year."

Table 4 summarizes five scales and corresponding item numbers on the survey. The complete survey is located in Appendix B.

Interview Protocol

The researcher developed an interview protocol to gather the participants' perceptions on their job embeddedness and intentions to stay. The protocol captured work related and non-work related factors that facilitated and detracted

Table 4

Survey Summary

Variable	Number of questions	Question numbers
Demographic characteristics scale	12	1-12
Job embeddedness scale		
Fit-to-community	5	13-17
Fit-to-organization	9	18-26
Links-to-community	6	27-32
Links-to-organization	4	33-36
Sacrifice-to-community	3	37-39
Sacrifice-to-organization	10	40-49
Subtotal	37	
Job satisfaction scale	3	50-52
Affective organizational commitment scale	8	53-60
Turnover Intention	2	61-62
Total	62	

from their job embeddedness. This protocol aimed to provide a richer and contextual understanding of job embeddedness and the retention of public higher education employees. Additionally, the instrument sought to provide evidence of the reasons the employees chose to remain with their employer. The interview protocol consisted of six questions. A sample question from this protocol is "Which would be more difficult, leaving your job or your community and why?" The complete interview protocol is located in Appendix D.

Validity and Reliability of Instruments

In conducting research, the validity of the instruments involved is essential to ensuring the quality of the data and results (Creswell & Plano Clark, 2007). The

approaches for checking the validity are different for quantitative and qualitative research.

For quantitative research, the primary approaches are validity and reliability. Validity ensures that "the researcher can draw meaningful inferences from the results to a population" (Creswell & Plano Clark, 2007, p. 133). On the other hand, reliability considers whether the participants' "scores are consistent and stable over time" (Creswell & Plano Clark, 2007, p. 133). These approaches were considered from two contexts: past and present.

In the past context, the reliability and validity focused the instrument's use in past research. The researcher chose to modify an existing survey instrument based on its prior use in job embeddedness research and its internal reliability. Internal reliability primarily dealt with whether the instrumentation measured what was intended to be measured (Ary et al., 2010). In the original study, Mitchell et al. (2001) tested the internal reliability of the job embeddedness construct using two samples. The first sample consisted of 177 grocery workers. The second sample contained 208 hospital workers. Mitchell et al. (2001) calculated the Cronbach's Alpha Coefficients for each dimension of the job embeddedness construct. The results of these internal reliability tests for both samples are in Table 5. In subsequent studies, the job embeddedness scales have shown to be reliable (Crossley, Bennett, Jex, & Burnfield, 2007; Halbesleben & Wheeler, 2008; Holtom & O'Neill, 2004; Jiang, Liu, McKay, Lee, & Mitchell, 2012).

In the original study, Mitchell et al. (2001) tested the validity of the job embeddedness construct using interviews from two samples. The first sample consisted of 21 employees from two stores within a chain. The researchers conducted preliminary interviews with these individuals. The data from the interviews led to the addition of six items. The second sample consisted of 12

Table 5

Mitchell et al. (2001) Cronbach's Alpha Coefficients

	Grocery	Hospital
Fit-to-organization	.75	.86
Fit-to-community	.78	.79
Links-to-organization	.65	.62
Links-to-community	.77	.50
Sacrifice-to-organization	.82	.82
Sacrifice-to-community	.61	.59
Overall job embeddedness	.85	.87
Job satisfaction		.85
Affective organizational commitment	.86	.89
Turnover Intention	.95	.97

hospital employees. These interviews were used to pre-test the scaled-items and to check their relevance. None of the 33 employees participated in the subsequent surveys. After deliberations and weekly meeting spanning a year, the researchers confirmed the instrument's content validity.

For this study, the researcher used two methods to determine the reliability of the survey instrument. Cronbach's Alpha was used to test the internal consistency of scales for fit-to-organization, fit-to-community, links-to-organization, sacrifice-to-organization, sacrifice-to-community, job satisfaction, affective organizational commitment, and turnover intention. Table 6 displays the results of the Cronbach's Alpha. Based on the results of the pilot study, the researcher used the Guttman Split-half test to assess the reliability of the links-to-

community scale. The Lambda 4 coefficient for this scale is reported in Table 6 with an asterisk. The results indicated that the scales were within an acceptable range for reliability.

Table 6

Reliability Analysis

Scales	Pilot	Public HE
Fit-to-organization	.92	.89
Fit-to-community	.89	.89
Links-to-organization	.47	.48
Links-to-community	.62*	.53*
Sacrifice-to-organization	.88	.84
Sacrifice-to-community	.66	.61
Overall job embeddedness	.89	.91
Job satisfaction	.77	.87
Affective organizational commitment	.91	.88
Turnover intention	.97	.93

To establish the content validity, the researcher used a faculty committee. The researcher met with the committee members requesting their input in determining the validity of the survey. Based on their feedback, the researcher modified the survey instrument accordingly. The modifications included the removal of one item from the Turnover Intention scale and the refinement of selected demographic questions.

Pilot Study

To confirm the validity and reliability of the instruments, the researcher conducted a pilot study. The participants were recruited using a snowball approach. The snowball approach involved the researcher emailing a link to the electronic survey to several people, who were not part of the main study population. The researcher asked people to complete the survey, as well as forward the email to others. The process resulted in sixteen participants choosing to take the electronic survey. The final sample size for the pilot study was 13 after removing one incomplete and two invalid responses.

Demographics

The pilot sample was predominantly White (46.2%) and Female (84.6%). The participants' ages ranged from 33 to 56 years old, with the average age being 43.9 years. The majority of the participants worked primarily for private organizations (53.8%). On average, the participants had 11.7 years of experience with their organization with years of experience ranging from less than one year to 24 years. The majority of the participants were non-IT professionals (53.8%).

Reliability Analysis

The researcher used two methods to compute the reliability of the survey instrument. Cronbach's Alpha was used to test the internal consistency of scales for fit-to-organization, fit-to-community, links-to-organization, sacrifice-to-organization, sacrifice-to-community, job satisfaction, affective organizational commitment, and turnover intention. Table 6 displays the results of the Cronbach's Alpha. The links-to-community scale contained four questions requiring Yes/No responses. The nature of these responses violated the assumptions for the Cronbach's Alpha. As such, the researcher used the Guttman

Split-half test to assess the reliability of the links-to-community. The Lambda 4 coefficient for this scale is reported in Table 6 with an asterisk. The results indicated that the scales were within an acceptable range for reliability.

Other outcomes from the pilot study revealed organizational issues with the electronic survey. The organizational issues dealt with the logical flow of the survey and the grouping of the job embeddedness scales. As such, the final survey instrument was structured differently to address these issues. The final version of the survey instrument is located in Appendix E.

To authenticate the reliability of the interview protocol, the researcher interviewed the selected participants using the proposed interview protocol. At the conclusion of the interviews, the researcher debriefed the participants. The debriefing included a discussion of the interview protocol. Based on debriefing information, the researcher determined that interview protocol elicited the information desired.

Procedures

The mixed methods sequential embedded design consisted of two distinct phases. The first phase began with the administration of the electronic survey. After the survey period ended, the researcher downloaded the survey results from Survey Monkey as an SPSS dataset. The researcher removed any cases that were incomplete and any unique identifiers. After cleaning the data, the researcher computed the length of employment. Composite scores were computed for the job embeddedness dimensions, job satisfaction, affective organizational commitment, and turnover intentions as the mean of their respective scaled-items. The on-the job embeddedness was computed as the mean of the composite scores for fit-to-organization, links-to-organization, and sacrifice-to-organization. The off-the job embeddedness was computed as the mean of the composite scores for fit-to-

community, links-to-community, and sacrifice-to-community. Lastly, the researcher performed the quantitative data analysis using SPSS. The results of this data analysis are reported in Chapter 4.

In the second phase, the researcher focused on the qualitative aspect of the study. The researcher used random purposive sampling to select participants for the interviews. In this case, the researcher used the composite scores for on- and off-the job embeddedness and intentions to stay as criteria for selection. The goal was to produce a sample that represented participants with high and low job embeddedness and intentions to stay.

When considering sample sizes for qualitative phase, the researcher considered several factors. Bailey (2006) asserted that the number of cases used for qualitative research depended on "the purpose of the research, the research questions, the number of participants available, and the time and resources of the researcher" (Bailey, 2006, p. 64). Further, Bailey (2006) argued that too small of a sample could result in misleading findings. On the other hand, too large of a sample could make analysis of the result unwieldy (Bailey, 2006). Lastly, Bailey (2006) noted that the goal of an appropriate sample size was to reach the point of saturation, when the cases no longer added new data to the analysis.

In sequential, embedded mixed methods designs, the sample size for the qualitative phase is typically smaller than the quantitative phase (Creswell & Plano Clark, 2007). In an embedded design, the qualitative sample takes a secondary role to the quantitative sample and addresses a different question (Creswell & Plano Clark, 2007). In this study, the primary study purpose was addressed by the first research question, which was quantitative in nature. The second research question was qualitative in nature and served to supplement the primary data collection (Creswell & Plano Clark, 2007).

Once the qualitative sample was generated, the researcher conducted 10 - 15 minute semi-structured interviews (see Appendix E for the interview protocol) with the participants. The interviews were conducted over the telephone. With permission of the participants, the researcher recorded the interviews. The recordings were transcribed by a professional transcription service. After the transcriptions were completed, the researcher reviewed the transcriptions for accuracy and made changes where appropriate. Next, the researcher removed any identifiable information from the data, such as the name of the participant's university, professional associations, or communities, in which they lived.

To analyze the interview data, the researcher performed a thematic content analysis. The thematic content analysis permitted the researcher to develop themes regarding the participants' job embeddedness both on- and off-the job. The researcher imported the transcribed interview data into the computer-added quantitative data analysis software (CAQDAS), NVIVO. Using NVIVO, the researcher began open coding the quotes from the interviews. Open coding "deals with labeling and categorizing phenomenon in the data" (Ary et al., 2010, p. 465). After the open coding takes place, the researcher commenced with axial coding, which involved grouping similar coded quotes (Ary et al., 2010). Lastly, the researcher used selective coding to show connections between the categories or themes developed in the axial coding process and the job embeddedness construct (Ary et al., 2010). Lastly, the researcher used frequencies to reveal common themes. The results of the qualitative analysis are reported in Chapter 4.

Data Analysis

The initial data analysis consisted of describing the samples, comparing the quantitative sample to the target population, and analyzing the scaled-items. For the demographic characteristics, the researcher used frequency and descriptive

statistics. The frequency analysis provided participant counts by gender, ethnicity, education, and occupation as an IT professional. The descriptive statistics revealed the respondents' minimum, maximum, and mean for age and length of employment. For the scaled items, the researcher used descriptive statistics. The descriptive statistics showed the means, standard deviations, and frequencies of responses.

To address the research questions, the researcher conducted appropriate statistical analysis.

Research Question 1: To what extent did job embeddedness influence the intentions to stay among employees of public higher education?

To examine this question, the researcher performed a backward stepwise regression to determine if job embeddedness could predict the intentions to stay of public higher education employees. Additionally, the researcher used the backward stepwise regression to examine the influence of all variables on intentions to stay or quit. The independent variables consisted of the job embeddedness dimensions: fit-to-organization, fit-to-community, links-to-organization, links-to-community, sacrifice-to-organization, and sacrifice-to-community. The dependent variable was the intention to stay.

Research Question 2: How do public higher education employees perceive their job embeddedness on intentions to stay?

This question was qualitative in nature. The researcher performed a thematic content analysis. The analysis began with initial coding in which the researcher coded the participants' responses to the six questions on the interview protocol. In the axial coding, the researcher grouped together and labeled similar responses. Lastly, the researcher used selective coding to show connections between the themes developed in the axial coding process and the job

embeddedness including work and non-work factors. Lastly, the researcher used frequencies to reveal common themes.

Research Question 3: To what extent did job embeddedness, its dimensions, and intentions to stay vary between IT professionals and non-IT professionals in public higher education?

To examine this question, the researcher used the independent samples *t*-test. The independent samples *t*-test allowed the researcher to compare the means between the groups of IT professionals and non-IT professionals. The *t*-test showed whether a significant difference existed between the two groups. The grouping variable for this question was a dichotomous variable, Occupation, with two levels: IT Professional and Non-IT Professional. The dependent variables were the continuous composite scores for overall job embeddedness, its six dimensions, and turnover intention. The overall job embeddedness was computed using the mean of scaled items for each dimension. Composites scores for the job embeddedness dimensions consisted of mean of their respective scaled items.

Table 7 summarizes the research plan for this study. The table shows the research questions, the information required, data sources, and proposed statistical analysis.

Limitations

In a mixed methods study, limitations can arise from a number of factors. In quantitative research, the most common limitations relate to internal validity and external validity. In qualitative research, the limitations arise from credibility and trustworthiness.

Internal validity referred to "the inferences about whether the changes observed in a dependent variable are, in fact, caused by the independent variable(s) in a particular research study than by some extraneous factors"

Table 7

Research Plan

Research Question	Information Required	Data Source	Statistical Analysis
To what extent did job embeddedness predict the intentions to stay among employees of public higher education?	• Demographic data • Fit-to-community composite score • Fit-to-community composite score • Links-to-community composite score • Links-to-organization composite score • Sacrifice-to-community composite score • Sacrifice-to-organization composite score • Turnover intention composite score	Survey	• Backward stepwise regression on fit-to-community, fit-to-organization, links-to-organization, links-to-community, sacrifice-to-organization, sacrifice-to-community, and turnover intentions
How did public higher education employees perceive their job embeddedness on intentions to stay?	• Employee perceptions on work-related factors for staying • Employee perceptions on non-work factors for staying • Employee perceptions on work-related factor would make them leave • Employee perceptions on non-work factors that would make them leave • Employee perception on whether work or non-work factors would make it harder to leave	Interviews	• Thematic Content Analysis • Open coding of transcripts • Axial coding of transcripts • Selective coding of transcripts • Frequencies for common themes
To what extent did job embeddedness, its dimensions, and intentions to stay vary between IT professionals and non-IT professionals in public higher education?	• Job embeddedness composite score • On-the job embeddedness composite score • Off-the job embeddedness composite score • Turnover intention composite score	• Survey	• Independent samples *t*-tests for survey

(Ary et al., 2010, p. 272). Since this study used statistical tests to determine causality between job embeddedness and turnover intentions, the potential for threats to internal validity existed. To address this potential circumstance, the researcher controlled for confounding variables by analyzing the covariance among these variables. The confounding variables included age, gender, length of employment, and proximal factors, which previous studies have shown to influence the relationship between job embeddedness and turnover intentions.

External validity dealt with the "extent to which the findings of a study can be generalized to other subjects, settings, and treatments" (Ary et al., 2010, p. 292). For this study, threats to external validity can arise from selection-treatment and reactive effects. An insufficient representation of IT professionals in the sample could give rise to selection-treatment effects. The low representation could result in over- or under-stating the influence of job embeddedness on intentions to stay.

Lastly, the response rate from the survey could yield a small sample size. To address this situation, the researcher used a nominal incentive to encourage participation in the study, along with conducting the survey over a 60-day duration that to increase the participation. The nominal incentive consisted of the participants having an opportunity to win a $100 Amazon gift certificate. The participants self-selected to participate in the drawing.

Reactive effects occur when the respondents have strong views about their attachments, compatibility, and sacrifices for their jobs, organization, and community. As result, these participants may manipulate their responses intentionally to favor their predetermined views (Ary et al., 2010). The resultant effect could slant the psychometrics used in this study. These threats occurring

from selection-treatment and reactive effects could limit the generalizability of the findings.

Credibility and trustworthiness are the primary approaches for qualitative research. In qualitative research, limitations affect the credibility and trustworthiness of the findings. Credibility considers the extent to which the researcher evoked confidence in the findings (Ary et al., 2010). The researcher used data triangulation to increase the credibility of the findings. The quantitative data was used to confirm the findings from the interview data.

Another potential limitation of this study was the use of one rater for the content analysis. In this case, the utilization of one rater for the content analysis had the potential for researcher bias. To reduce this bias and increase trustworthiness, the researcher utilized a code-recode strategy. In the code-recode strategy, the researcher coded the data, waited for a period, recoded the data, and then compared the two sets (Ary et al., 2010). This process of re-coding increased the credibility and reliability of the results.

<div align="center">

Summary

</div>

Chapter 3 described the purpose of the study and discussed the methodology the researcher used to conduct this study. Additionally, this chapter provided a description of   the participants, data collection, instrumentation, pilot study, procedures, data analyses, and limitations.

CHAPTER 4: RESULTS/OUTCOMES

Chapter 4 focuses on the results and outcomes from the data analysis. This section presents a review of the methodology, the descriptive analysis, and the results of the research questions. This section concludes with a summary of the findings.

Review of Methodology

The purpose of this study was to investigate the reasons employees in public higher education chose to remain with their employer based on their job embeddedness. The primary purpose of this study was to determine if job embeddedness predicted the retention of public higher education employees. A secondary purpose of this study was to explore qualitatively the on-the and off-the job factors that facilitated or detracted from public higher education employees' job embeddedness. Additionally, this study aimed to determine whether the intentions to stay differed among information technology professionals and non-information technology professionals based on their job embeddedness. This study addressed the following three research questions:

1. To what extent did job embeddedness influence the intentions to stay among employees of public higher education?

2. How did public higher education employees perceive their job embeddedness on intentions to stay?

3. To what extent did job embeddedness, its dimensions, and intentions to stay vary between IT professionals and non-IT professionals in public higher education?

This study employed a mixed method, sequential embedded design. As such, the study had two distinct phases: quantitative followed by qualitative.

Quantitative data were collected through an electronic survey, which was emailed to employees working for the CSU system. Qualitative data were gathered using semi-structured interviews to gain information regarding the factors that facilitated and detracted from the job embeddedness of the participants.

Characteristics of Samples

The mixed-methods, sequential embedded design used two samples, one for each phase. In the first phase, the researcher used a convenience sampling of 1,342 CSU staff employees, who responded to an invitation to participate, which the CSUEU distributed electronically. The invitation contained a link to an electronic survey hosted on Survey Monkey. The CSUEU distributed the invitation using different electronic media to approximately 12,500 employees. The response rate was 10.7%. After removing the incomplete responses and invalid cases, the sample contained 1,127 participants.

Although the response rate for the electronic survey was 10.7%, the resulting sample size was more than adequate for making inferences regarding the target population. The estimated minimum sample size for a target population of 12,500 individuals with a 3% margin of error and 95% confidence level was 984 participants. This present study resulted in a sample size of 1,127 participants representing a margin of error of 2.78% at the 95% confidence level. This suggested a low probability that the responses were due to chance (Ary et al., 2010).

The participants were primarily female (72.2%) and White (62.4%). Table 8 shows the ethnicity composition of the sample. The participants ranged in age from 21 to 78 years of age, with the average age being 46.4 years. Close to two-thirds (66.6%) of the participants possessed a bachelor's degree or higher. Table 8 also shows the sample composition by education. The participants' length of

employment with their university ranged from less than a year to over 46 years, with the average length of employment being 11.3 years. The majority (81.6%) of the participants worked in non-IT occupations.

Table 8

Survey Sample - Ethnicity Composition (Highest to Lowest)

Variables		N	Frequency	Percentages
Ethnicity		1127		
	White		703	62.4%
	Hispanic		186	16.5%
	Asian		125	11.1%
	Other		66	5.9%
	Black		47	4.2%
Education Level		1127		
	Bachelor's Degree		502	44.5%
	Master's Degree		233	20.7%
	Some College		227	20.1%
	Associate or Vocational Certificate		124	11.0%
	High School or GED		25	2.2%
	Doctorate Degree		16	1.4%
Occupation		1127		
	Non-IT Professional		920	81.6%
	IT Professional		207	18.4%

For the participants working as IT professionals, the participants were primarily male (63.8%) and White (66.7%). The average age of the IT professionals was 46.4 years of age and ranged in age from 23 to 72 years in age. Seventy-two percent of the IT professionals possessed a bachelor's degree or higher. On average, the IT professionals had 12.6 years of employment with their university. Their length of employment ranged from less than one year to over 35 years. Table 9 shows the demographics for the IT Professionals.

Table 9

Survey Sample – IT Professionals (Highest to Lowest)

Variables		N	Frequency	Percentages
Ethnicity		207		
	White		138	66.7
	Asian		29	14.0
	Other		18	8.7
	Hispanic		17	8.2
	Black		5	2.4
Education Level		207		
	Bachelor's Degree		94	45.4
	Master's Degree		54	26.1
	Some College		41	19.8
	Associate or Vocational Certificate		15	7.2
	High School or GED		2	1.0
	Doctorate Degree		1	0.5

From the electronic survey responses, 604 respondents agreed to participate in the qualitative phase of the study. The researcher used random purposive sampling to select the qualitative sample. As consistent with sequential, embedded mixed methods design, the qualitative sample was smaller than the quantitative sample (Creswell & Plano Clark, 2007). Although Creswell and Plano Clark (2007) suggested that 20 cases as a nominal sample size for qualitative inquiry, Bailey (2006) noted that the goal of an appropriate sample size was to reach the point of saturation, when the cases no longer added new data to the analysis. In the case of this study, the researcher reached saturation around the fifteenth interview. At the fifteenth interview, the researcher's field notes indicated that subsequent interview data replicated information acquired from the previous interview cases. The end result produced a sample of 17 participants, which was more than sufficient for this research design.

The participants were primarily female (11) and non-White (8). Table 10 shows the ethnicity composition. The participants ranged in age from 23 to 62 years of age with an average age of 45.6 years. Over 70% (12) of the participants possessed a Bachelor's Degree (9) or Master's Degree (3). Table 10 also shows the educational breakdown of the participants. The participants' length of employment with their university ranged from less than 2 years to over 21 years, with the average length of employment being 11.3 years. The majority (11) of the participants worked in non-IT occupations.

For the participants working as IT professionals, they were all male (6) and White (3). The average age of the IT professionals was 45.2 years of age and ranged in age from 34 to 59 years in age. Five of the IT professionals possessed a bachelor's degree or higher. On average, the IT professionals had 10.2 years of

Table 10

Interview Sample - Ethnicity Composition (Highest to Lowest)

Variables		N	Frequency	Percentages
Ethnicity		17		
	Other		8	47.1
	White		6	35.3
	Black		2	11.8
	Hispanic		1	5.9
	Asian		0	0.0
Education Level		17		
	Bachelor's Degree		9	52.9
	Master's Degree		3	17.6
	Some College		3	17.6
	Associate or Vocational Certificate		2	11.8
	High School or GED		0	0.0
	Doctorate Degree		0	0.0
Occupation		17		
	Non-IT Professional		11	64.7
	IT Professional		6	35.3

employment with their university. Their length of employment ranged from over 6 years to over 20 years. Table 11 shows the demographics for the IT Professionals for the qualitative sample.

Table 11

Interview Sample – IT Professionals (Highest to Lowest)

Variables		N	Frequency	Percentages
Ethnicity		6		
	White		3	50.0
	Black		2	33.3
	Other		1	16.7
Education Level		6		
	Bachelor's Degree		4	66.7
	Master's Degree		1	16.7
	Some College		1	16.6

Results of Research Questions

To address the research questions, the researcher performed several statistical analyses. The first research question was analyzed using a Backward Stepwise Regression. The researcher performed a Thematic Content Analysis to address the second research question. Lastly, the third research question was analyzed using Independent Samples *t*-tests.

Research Question 1

The first research question inquired about the extent to which job embeddedness influenced the intentions to stay among employees of public higher education. To address this question, the researcher used a linear stepwise

regression with backward entry to examine the predictive value of the job
embeddedness dimensions on intentions to stay. Using the mean of their scaled
items, composite scores were computed for each job embeddedness dimension and
for the intentions to stay. The independent variables consisted of the six job
embeddedness dimensions: fit-to-organization, links-to-organization, sacrifice-to-
organization, fit-to-community, links-to-community, and sacrifice-to-community.
The independent variables were regressed on the intentions to stay, the dependent
variable. The results of this analysis are presented in Table 12.

Table 12

Linear Backward Stepwise Regression Analysis

Model	B	SE-B	Beta	Pearson r	sr^2	Structure Coefficient
Constant	6.310**	.213				
Fit-to-organization	-.353**	.051	-.238	-.497	0.029	-0.877
Sacrifice-to-organization	-.605**	.061	-.343	-.530	0.060	-0.935
Links-to-community	-.166*	.076	-.054	-.062	0.003	-0.109
Sacrifice-to-community	-.097*	.042	-.062	-.286	0.003	-0.504

*Note. The dependent variable was Intention to Stay. R^2=.321, Adjusted R^2 = .319.
sr^2 is the squared semi-partial correlation. * $p < .05$, **$p<.001$.*

The table shows the raw (B), raw standard error (SE-B), and standardized
(Beta) coefficients of the predictors together with their correlations with intentions
to stay (Pearson r), their squared semi-partial correlations (sr^2), and their structure
coefficients.

Sacrifice-to-organization received the strongest weight in the model (sr^2 =
.060) followed by fit-to-organization (sr^2 = .029), links-to-community (sr^2 = .003)
and sacrifice-to-community (sr^2 = .003) received the lowest of the four weights.
The unique variance explained by each of the variables indexed by the squared

semi-partial correlations, was relatively low: fit-to-organization and sacrifice-to-organization uniquely accounted for approximately 6%, and 3% of the variance of intentions to stay. However, links-to-community and sacrifice-to-community uniquely accounted for less than 1% of the variance of intentions to stay. Inspection of the structure coefficients suggested that sacrifice-to-organization (-0.935) and fit-to-organization (-0.877) were very strong indicators of intentions to stay, sacrifice-to-community (-0.504) was a moderate indicator of intentions to stay, and links-to-community (-.0109) was a weak indicator of intentions to stay.

Overall, the model suggested that sacrifice-to-organization and fit-to-organization and to a lesser extent by links-to-community and sacrifice-to-community predicted intentions to stay. The model was statistically significant, $F(4,1122) = 132.750$, $p < .001$. The multiple correlation coefficient was .567, indicating 32% of the variance of the intentions to stay ($R^2 = .321$, Adjusted $R^2 = .319$) could be accounted for by the linear combination of sacrifice-to-community, links-to-community, fit-to-organization, and sacrifice-to-organization. The regression equation for predicting the intentions to stay was:

Predicted intentions-to-stay = 6.310 - .353(fit-to-organization) - .605(sacrifice-to-organization) - .166 (links-to-community) - .097(sacrifice-to-community).

Notably missing from the model are the variables, links-to-organization and fit-to-community. Links-to-organization was excluded in step 2 of the regression. The R Square Change showed that excluding links-to-organization had no change on the total variance. The model remained significantly related to intentions to stay, $F(5,1121) = 106.416$, $p < .001$. The multiple correlation coefficient was .567, indicating 32% of the variance of the intentions to stay could be accounted for by the five remaining variables. This result suggested that links-to-

organization was not a significant predictor of intentions to stay. The results of
the model with the excluded variables are shown in Table 13.

Table 13

Model Summary with Excluded Variables

Model		df	*F*	Sig.	*R*	R^2	Adjusted R^2	R Square change
1	Regression	6	88.734	.000[b]	.568[a]	.322	.319	.322
2	Regression	5	106.416	.000[c]	.567[b]	.322	.319	.000
3	Regression	4	132.750	.000[d]	.567[c]	.321	.319	-.001

a. Dependent Variable: CompTC
*b. Predictors: (Constant), CompSTC, CompLTC, CompLTO,
CompFTO, CompFTC, CompSTO*
*c. Predictors: (Constant), CompSTC, CompLTC, CompFTO,
CompFTC, CompSTO*
*d. Predictors: (Constant), CompSTC, CompLTC, CompFTO,
CompSTO*

In step 3, the regression excluded fit-to-community. The *R* Square Change
showed that excluding the fit-to-community made no difference on the total
variance. The model remained significantly related to intentions to stay,
$F(4,1122) = 132.750$, $p < .001$. The multiple correlation coefficient was .567,
indicating 32% of the variance of the intentions to stay could be accounted for by
the four remaining variables. This result suggested that fit-to-community was not
a significant predictor of intentions to stay.

Research Question 2

The second research question was qualitative in nature. It inquired about
how public higher education employees perceived their job embeddedness on

intentions to stay. To respond to this question, the researcher performed a thematic content analysis using the data collected from the semi-structured interviews. The thematic content analysis allowed the researcher to develop themes regarding the participants' job embeddedness both on- and off-the job.

During the interviews, the researcher asked the participants six questions. The first four questions inquired about the reasons the participants remained at their university and in their communities and the factors the participants would consider if they left their university and community. The fifth question asked the participants about which would be harder to leave their university or their community. The last question provided the participants an opportunity to add any relevant comments about the questions asked. Additionally, the participants selected pseudonyms to be referred to as. These pseudonyms are used herein when quoting the participants.

Collectively, the selective coding for the 17 participants generated 330 references to the six interview questions. The references were categorized as work factors, non-work factors, and choices. Within the work factors and non-work factors, the themes were grouped as reasons for staying and reasons for leaving. For the choices category, the themes were grouped based on their selections: community, university, and both. Table 14 presents the summary of the selective coding.

Work-related factors. The work-related factors category contains the themes that emerged from Interview Questions 1 and 3. These questions inquired about the reasons the participants remained at their universities and the reasons they would leave their university. During the interviews, the participants' responses included positive and non-positive aspects of working at their

Table 14

Selective Coding Summary

Categories	*N*	References
Work Factors		
Reasons why staying with their university	17	102
Reasons why they would leave their university	17	93
Sub-total	17	195
Non-Work Factors		
Reasons why staying in their community	16	44
Reasons why they would leave their community	17	42
Sub-total	17	86
Choices		
Chose community as more difficult to leave	9	22
Chose university as more difficult to leave	5	15
Could not choose between university and community	3	12
Sub-total	17	49
Total	17	330

universities. The researcher considered any positive references towards their university as reasons for staying. For the non-positive references, the researcher merged these references with the reasons to leave the university. The final groupings were reasons why they remain with universities and reasons they would leave their universities.

   Reasons why they remain with their universities. For the reasons why they remain with their universities, the 17 participants generated 102 references and 7 themes. Figure 10 shows the themes that emerged regarding the reasons why the participants stayed with their universities. The top four themes were feelings toward their university (14), perceptions toward their job (13), benefits (6), and coworker relations (6).
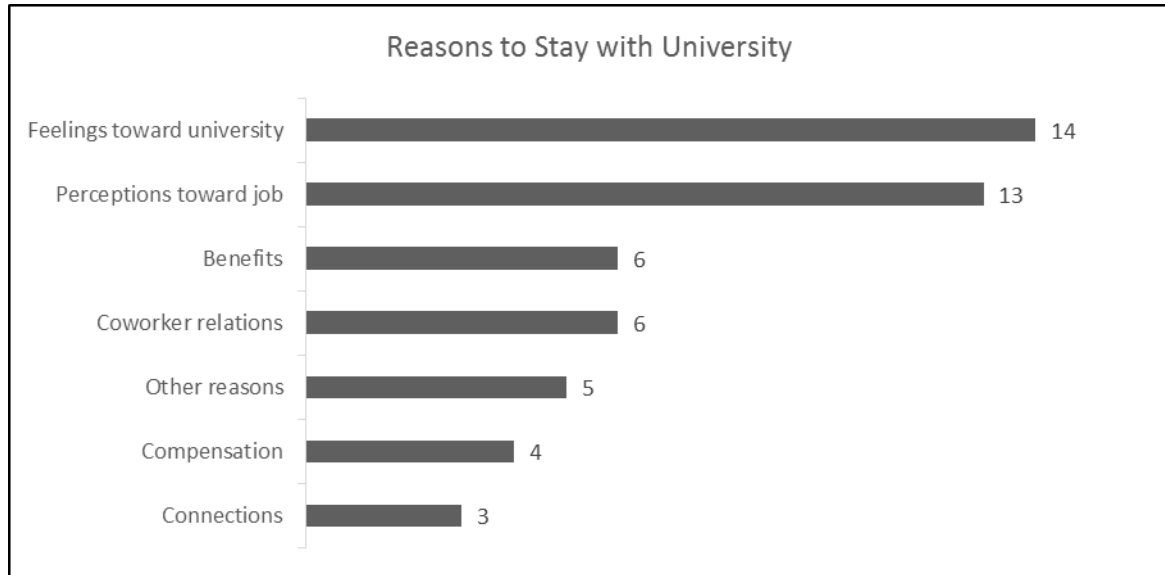
Figure 10. Reasons to stay with the university.
Note: This graph displays the themes and participant counts for the reasons why the participants continued to work for their university based participant counts.

1. Feelings toward university. Over 80% (14) of the participants stayed with their university because of their feelings towards their university. The major sub-themes centered around their university providing a great environment (8), offering opportunities to help others (6), becoming their community (4), and aligning with their personal values and beliefs (4).

a. Great environment. The most cited sub-theme was the participants' feeling that their university was a great environment. Their comments included statements, such as "it's one of the best places in the [city] to work," "I really enjoy working on the campus in the education field," and "The environment on the campus is very positive."

b. Helping others. Several participants described how they enjoyed helping students (5) and faculty (2). One participant mentioned their enjoyment with supporting those who support others. Emily, a 39 year old, non-White female with a bachelor's degree and 16 years of professional experience stated

Being able to help people because I don't really specifically work with students too much in my position that I'm in now, but just helping the faculty and just with anything that's mostly with different kind of pay issues, but getting things resolved for them or completing different kind of tasks that then has an effect on students down the line. That's rewarding to know I'm part of that (Emily, personal communication, October 7, 2014).

c. Their community. Four participants shared how the university had become their community. The participants described enjoying the closeness of their campus community, the engaging with people of similar interests, and the attachments they had to the staff and faculty. One participant indicated that the reason he chose to work for the university was for the community. Sam, a 34 year old, White male with a bachelor's degree and 9 years of employment at his university, stated

This university helped me a great deal to transition from youth to adulthood, and I made a lot of great connections with the faculty and staff here that I wanted to be a part of that community and give back (Sam, personal citation, October 9, 2014).

d. Alignment. Four participants talked about the importance of the university's mission aligning with their personal goals, beliefs, and mission. They mentioned aligning with the university's educational mission of helping students attain a degree and helping people in higher education in general, whether directly or indirectly. Blue, a 46 year old, non-White female with some college and 31 years of professional experience stated

I mean I personally in my workplace environment, the people I work with directly are absolutely wonderful. I mean I work with amazing faculty who do amazing work not only on the campus community but in the wider [city] area, even in the global community. I mean they are traveling all over the place and doing so much amazing work that it makes it really enjoyable for me to actually support them because I feel like I'm meeting my mission statement, which is to help people become educated about [important topics] even though I'm not directly teaching them I'm supporting people that do (Blue, personal communication, October 8, 2014).

2. Perceptions Towards Job. Over three-fourths (13) of the participants remained with their university because of their perceptions toward their jobs. The three sub-themes that emerged dealt with the participants feeling their jobs were rewarding (7), stable (6), and flexible (3). One sub-theme involved their feelings on utilization of their skills (3).

a. Rewarding job. Seven participants reflected on how their jobs were rewarding. Their comments included "the job I do matters," "the work we do is very exciting to me," and "I really enjoy what it is I do, and it's, to me, just a great environment." John, a White male, 47 years of age, with a bachelor's degree and 7 years in his position, stated

> The environment on the campus is very positive. Within my department, we also have a pretty positive outlook and going through a lot of changes. That's exciting to me. I would say it's important to me to be a part of an organization that aligns well with my own beliefs or goals. I consider myself a lifelong learner. Working in a college environment plays into that pretty well. I enjoy being around people who are also interested in learning and growing things (John, personal communication, October 8, 2014).

b. Stable job. Six participants spoke about having a stable job. Their comments included having job security and being able to support their family. Additionally, they mentioned the importance of having stable employment during the economic downturn.

c. Flexible job. Three participants talked about their job flexibility. One participant, who worked previously in the private sector, spoke about the importance of having set work schedules and not having to work 14-16 hour days. Another participant talked about being able to take time off, especially when her children were ill. Another participant mentioned having semi-independence in her role. Anna, a 47 year old, White female with a bachelor's degree and 7 years of experience stated

Sometimes hearing other friends talk about the difficulty with basically, if they have a sick kid, which fortunately I haven't had that come up very much, but it sounds like other employers are a lot less flexible with families (Anna, personal communication, October 3, 2014).

d. Skills utilization. Three participants commented about the contribution of their skills. Their comments included feeling that their skills were needed, that their skills contributed to the university's overall missions and that their skills were valued by the university.

3. Benefits. Over one-third (6) of the participants mentioned the benefits of working for the university. Three participants stated that the overall benefits were good. Two participants discussed how they benefitted personally from the fee waivers. Other participants indicated that the health (2) and retirement (2) benefits were good. Halle, aged 49 non-White female with an associate degree and over 8 years of experience stated

> I would say the health benefits, the retirement, and actually initially, I came on board because I was seeking ... My children were actually going into college and they had the fee waivers for dependents, so that was another reason why I was seeking employment here at [my university] (Halle, personal communication, October 7, 2014).

4. Coworker Relations. Thirty-five percent (6) of the participants stated they stayed with their university because of their relationships with their coworkers. Three major themes emerged in this category. The first theme was having enjoyable coworkers, which three participants stated. The second theme was having coworkers who were easy to work with, which two participants mentioned. Lastly, one participant mentioned feeling appreciated by her coworkers.

Reasons why they would leave their universities. For the reasons the participant would leave their universities, the 17 participants generated 91 references and 8 themes. Figure 11 shows the themes that emerged as the reasons

why the participants would leave with their universities. The top four reasons were better university culture (9), job-related reasons (7), better compensation (6), and relocation (6).
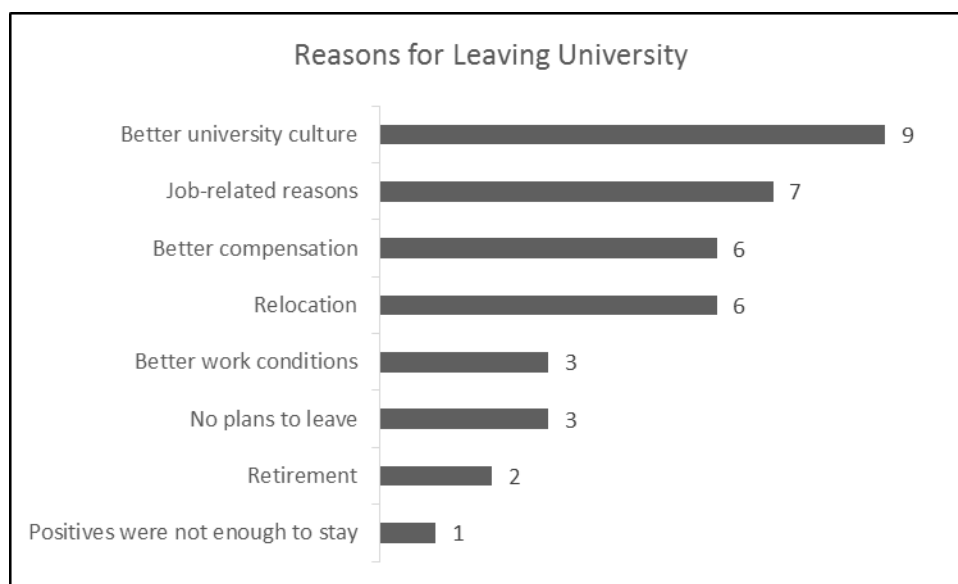
Figure 11. Reasons for leaving the university.
Note: This graph displays the themes and participant counts for why the participants would leave their university.

1. Better university culture. Over half the participants (53%) spoke about the university culture as reason for leaving. This theme contained six sub-themes of which the need for appreciation and value (5), for working as collaborative professionals (3), and for more inclusion (2) were the most cited.

a. Appreciation and value. The most cited sub-theme was the participants need to be appreciated and valued (5). This sub-theme reflected the participants feeling that they are part of the university and that their contributions were valued and appreciated. Dexter, a White male aged 36 with a bachelor's degree and nearly ten years employment remarked that

> When I first started at the university, I felt like I was a part of something. I felt like my contributions were valued and that they were taken seriously and I felt like I could affect change both small and large at the university,

but as time has gone on and the people I've worked with have changed and the situations has changed and the nature of the university has changed, and I've come to the realization that I don't have that kind of buy in any more. I don't feel like I'm a part of the community here anymore and I feel like if it wasn't for the so called golden handcuffs of the salary and pension and benefits that come with working at this university, I would simply not still be here (Dexter, personal communication, October 10, 2014).

b. Treatment. Another major sub-theme was the need to be treated as collaborative professionals (3). This sub-theme reflected the participants' perceptions on their treatment as staff, the division between faculty and staff, and equitable acknowledgement for their contribution to the university mission. Sam, a 34 year old, White male with a bachelor's degree and close to 9 years of employment commented that

There is a very strong divide between faculty and staff. It shows its way in many forms. One of the immediate is that the staff are often asked to support the faculty. In many ways, that is our role, but we're asked to support them morally as well, to back what they're doing, to feel their need. In a lot of ways, we do. We show up for rallies and what not.

Staff don't get rallies. The faculty don't show up to support the staff, and say hey these guys need more money. We constantly get the back seat. At a certain point, that's a class divide. If you're asking the lower class to support the upper class, but you're not asking the upper class to support the lower class, the lower class just leaves or find another way (Sam, personal communication, October 9, 2014).

c. Inclusion. The last major sub theme was the need for the environment to be more inclusive of new employees and diversity (2). This sub-theme reflected the participant's feeling regarding their challenges with fitting in as a new employee and with sensitivity to diversity. Blue, a 46 year old, non-White female with some college and nearly 14 years in her current position stated

I guess one of the biggest things is like while I do like how close-knit the campus community can be, it also has its ... it also tends towards having a lot of workplace dysfunctionality. If you're not somebody who is a peg that fits right in it makes it a little bit harder within the circles (Blue, personal communication, October 8, 2014).

2. Job-related factors. Over 41% of the participants commented that they would leave their university for job-related reasons. The primary job-related reasons were lack of growth opportunities and training and professional development opportunities. The participants cited lack of opportunities for growth (6) most often. The participants' comments included "The opportunities for growth are a little bit more limiting than I would prefer," "I would say wanting more growth is probably more of a driver," and "I don't feel like I can get ahead. There's no room for advancement in the area of work that I do here at [my campus]."

> In terms of lack of training and professional development, two participants commented they would leave their university for more training and professional development. Bob, a 54 year old, Black male with a master's degree and 13 years of professional experience stated

> My certification I did it on my own. I did not count on the university to pay for it or to pay for the courses I took or to pay for any kind of training material, I did it on my own. In other places, I have some colleagues working in other places and everything is covered for them. Right now, I belong to [a professional association]. Sometimes I have to take a day off to attend meetings there and I pay all my fees myself. Those are the key things that are making me think about leaving if an opportunity [were to] come up (Bob, personal communication, October 7, 2014).

3. Better compensation. More than one-third (6) of the participants indicated that they would leave for better compensation. The primary sub-themes that emerged were under compensation (5), the effects of their compensation (4), and the compensation system (2).

a. Under compensation. This sub-theme reflected the references of five participants on the compensation they received. Two of the five commented that they could earn two to three times more salary working for another employer. Betty, a 55 year old, non-White female with a master's degree and 15 years of professional experience commented "Well, faculty and the staff at the CSU has

dealt with salary stagnation for a number of years, which makes it increasingly difficult to get by" (Betty, personal communication, October 10, 2014).

   b. Effects of compensation. This sub-theme captured the comments of four participants on how their compensation affected them personally. These effects included feelings of being expendable, unappreciated, and unwanted. Some effects included the impact on the ability to retire, to attract new employees, and to retain existing employees. Other effects dealt with the compensation not rewarding their experience, being commensurate with their knowledge, or compensating for extra work resulting from hiring freezes and furloughs. Betty, a 55 year old, non-White female with a master's degree and 15 years of professional experience stated

> If there's no way for me to continue to work through my salary range, to make a higher income, that reflects and rewards me for my experience and knowledge that I've gained while I'm working here, it makes you feel unwanted, or it doesn't matter.
>
> I feel like it sends a message of we don't care if you're here. Somebody else will take your job, so it doesn't really matter. You or somebody else, we don't care. That feeling of not being appreciated or being under-compensated…
>
> But, I'm also seeing that I may not be able to retire, ever. Not at the salary level that I'm being paid at this time. I have to think about practicality. Do I want to keep working forever, and just figure out what other options I might have that would make that better (Betty, personal communication, October 10, 2014)?

   c. Compensation system. This sub-theme reflected two participants' comments on the compensation system. Their comments spoke about the challenges with receiving pay increases through the university's In-Range Progression process and not receiving cost of living adjustments. John, a 47 year old, White male with a bachelor's degree and 7 years of professional experience stated

The pay structure is basically you're just frozen and you're frozen in at what you're hired in at. There isn't really a natural way to increase your pay through tenure other than in-range progressions, which are a real big hassle to do paperwork-wise. It's like this a real hassle. It's hard to actually get it to go through. That leaves you with looking for other positions within the school. I would say that's something I would want to say. It's a common theme that I hear through other co-workers (John, personal communication, October 8, 2014).

4. Relocation. The last theme that emerged regarding work-related factors dealt with relocation as a reason for leaving their university. Thirty-five percent (6) of the participants' comments related to this theme. The primary reasons for leaving due to relocation were for family (4) and better job opportunities (2). Two participants mentioned relocating for better weather and living accommodations.

a. Family. Four participants indicated that they would leave their university for family reasons. The family reasons included following their spouse, moving closer to family members, or moving for extenuation circumstances, such as an ill or elderly parent. Halle, a 49 year old, non-White female with an associate degree and over 8 years of employment with her university stated

I would leave, well ... because my husband actually is the breadwinner, it would probably be because he relocated, you know, he got a job offer out ... I mean somewhere else (Halle, personal communication, October 7, 2014).

b. Better job opportunities. Two participants indicated that they would leave their university to pursue better work. Their comments included leaving to work for another university or to accept a substantially lucrative job opportunity. Emily, non-White female aged 39 with 22 years of experience and a bachelor's degree remarked

It would probably be if we were moving out of town for some reason or if I was maybe offered a really great job somewhere with equal benefits and double the salary or something like that where it was really just an offer I could not pass

up, but I don't know of any of those around here. I don't really foresee anything like that (Emily, personal communication, October 7, 2014).

Non-work related factors. The non-work related factors category contained the themes that emerged from Interview Questions 2 and 4. These questions inquired about the reasons the participants remained in their communities and the reasons they would leave their community. During the interviews, the participants' responses included positive and non-positive aspects about living in their communities. The researcher considered any positive references towards their communities as reasons for staying. For the non-positive references, the researcher merged these references with the reasons they would leave their communities. The final groupings were reasons why they remain in their communities and reasons they would leave their communities.

Reasons why they remain in their communities. For the reasons why they remain in their communities, the 17 participants generated 44 references and 3 themes. The primary reasons the participants stayed in their communities was the community favorability (14), their family connections (5), and their longevity in the community (4). Figure 12 shows the themes that emerged as the reasons why the participants stayed in their communities.

1. Favorable community. The majority of the participants (14) chose to remain in their communities because of its favorability. The primary reason cited was the proximity to amenities (9). The participants commented that their community was close to their church, leisure activities, medical providers, and to other conveniences. Other reasons included that they enjoyed the area in which they lived (8). The participants mentioned that the community was nice (5), they enjoyed the area (2), they liked the lifestyle the community afforded them (1), and they were able to own a home (1). Other participants commented on the favorable
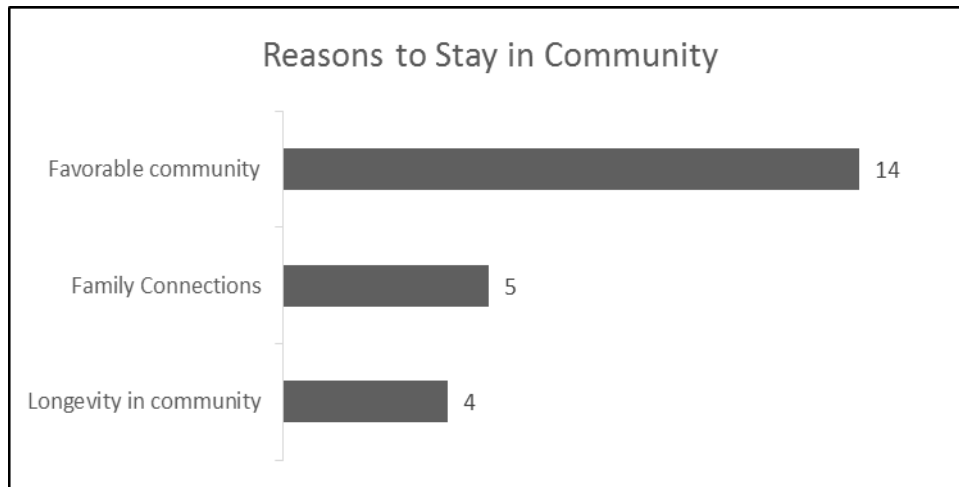
Figure 12. Reasons to stay in the community.
Note: This graph displays the themes and participant counts for the reasons why the participants remained in their communities.

climate (3) and the proximity of the community to their job or their spouse's job

(3). Sam, a White male aged 34 with a bachelor's degree and over 13 years of

professional experience commented

> This city really does hold a lot of the things that are important to me. I'm very much into say music. I'd go to a concert every day of the week if I could, and this city is a hub for music from around the world. I have so much opportunity to participate in things that matter to me. All the museums…, there's just so much to do here, and there's such a great opportunity to meet so many wonderful people from around the world. That's what keeps me here (Sam, personal communication, October 9, 2014).

2. Family connections. Twenty-nine percent (5) remained in their

communities due to their attachments to family. Four participants mentioned that

their family, such as their parents, their spouse's parents, or other family members,

lived in or near their community. One participant commented that their friends

and other social connections were in their community. Their comments included

"My parents still live here, so I'm not too far away from them" (Gretchen, personal

communication, October 6, 2014) and "The utmost importance is the family and social connections that I have" (Judy, personal communication, October 10, 2014).

3. Longevity in community. Four participants stayed in their community because of the length of time they spent in there. Two of the participants grew up in their community and another participant grew up near their community. One participant lived in their community a long time and had developed many attachments to their community. Their comments included "I was born in the city, my husband was born in the city, my kids were born in the city. We have a very deep connection to [this city]," (Blue, personal communication, October 8, 2014) and "I've lived in my community for thirty-five [years]. This is my second home" (Gretchen, personal communication, October 6, 2014).

Reasons why they would leave their communities. For the reasons they would leave their communities, the 17 participants generated 42 references and 4 themes. The primary reasons for leaving their communities was for their spouse and family (7) followed by seeking a better community (7). Other reasons for leaving the community included finding better employment opportunities. The last theme that emerged dealt with not leaving or not planning to leave their communities. Figure 13 shows the themes that emerged as the reasons why the participants would leave their communities.

1. Spouse and Family. Five participants indicated that they would leave their community to move closer to the family members or parents. One of the five participants mentioned they would leave under extenuation circumstances. Three participants would leave to follow their spouses or boyfriend, if their employers relocated them. One participant was willing to leave their community to live closer to friends. Emily, a 39 year old, non-White female with a bachelor's degree and 22 years of professional experience, remarked
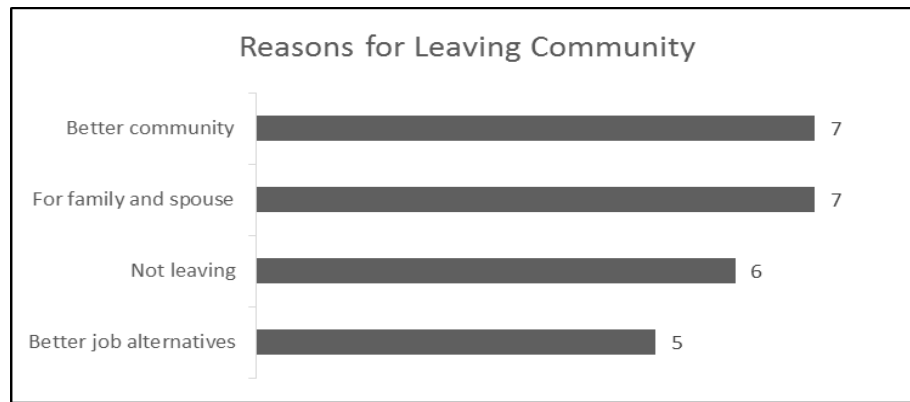
Figure 13. Reasons for leaving community.
Note: This graph displays the themes and participant counts for the reasons why the participants would leave their community.

> I would probably think it would be related to family needs or something like that, like if something happened that we really had to move closer to other family. My husband's job, I don't really see that changing to go anywhere else, but that might be another factor where if he had to move somewhere else and I'd follow, but I don't think that would ever happen. Those are the only things I can think of that would get us out of this community (Emily, personal communication, October 7, 2014).

2. Better community. Three participants were willing to leave their communities to be closer to amenities, such as church and leisure activities. Two participants would leave their community for a shorter commute to work. Another two participants indicated their willingness to move to a community where they could purchase a home. Two participants would consider leaving for a more suitable climate, such as a community that had seasons. Other comments including not being difficult to leave their community and needing a better community for their family. John, a White male aged 47 with bachelor's degree and close to 7 years of experience with his university, stated

> The primary factors would be that I would be moving to another, a different community that had … that appealed to my family in terms of the environment, opportunities for my family, proximity to employment or recreation, the potential for more opportunities in terms of lower cost of living.

In the community I'm in now, I'm not exactly going to go out and buy a house. That's probably true for most of California. If I were to look at in terms of changing my living situation or setting up, finding a location that was more conducive to future growth in terms of the home environment and that, or proximity to other family or friends, proximity to other job opportunities, or recreation, or things that we like to do. Those would all lead into it (John, personal communication, October 8, 2014).

3. Better employment opportunities. Five participants would consider leaving their communities to find better employment. One of the five participants would consider relocating for employment with another university. In terms of better employment, the participants mentioned finding new challenging work, a better fit, opportunity for professional growth, pursuing a different career, and earning a better living. Two participants were willing to seek employment with better work conditions. Betty, a 55 year old non-White female with a master's degree and 13 years of employment with her university, stated,

I mentioned our families that lived here, but most of my family lives somewhere else, so going to be there with them might be a choice, and also moving to a place where those opportunities to make a better living, to find new challenging work would also contribute to that decision (Betty, personal communication, October 10, 2014).

4. Not leaving. Three participants stated that they had no plans of leaving their community. Their comments included "Why would I leave?," and "I can't picture leaving my community." Anna, White female aged 47 with a bachelor's degree and 7 years of experience, stated

I can't think of anything, because I wouldn't have anything that would take me out of the area. I can't think of anything else besides my university that would take me away (Anna, personal communication, October 3, 2014).

Four participants mentioned difficulties with leaving their communities. Their comments included the inability to leave due to family obligations, the expense of relocating, the effects of moving on their family, and the challenges of leaving their support system of friends.

Choices. The choices category contained the themes that emerged from Interview Question 5. This question asked the participants to choose which would be more difficult to leave, their university or their community. The researcher coded their selections and their reasons the factors they considered in making their selection. In the cases, where the participants were unable to choose or chose their university and community, the researcher coded these under a separate category. The final groupings were community, university, and both.

The majority (9) of the participants found leaving their community more difficult. Five participants decided leaving their university would be more difficult. Lastly, three participants were unable to choose (2) or chose both (1). Figure 14 shows the results of the participants' selections.
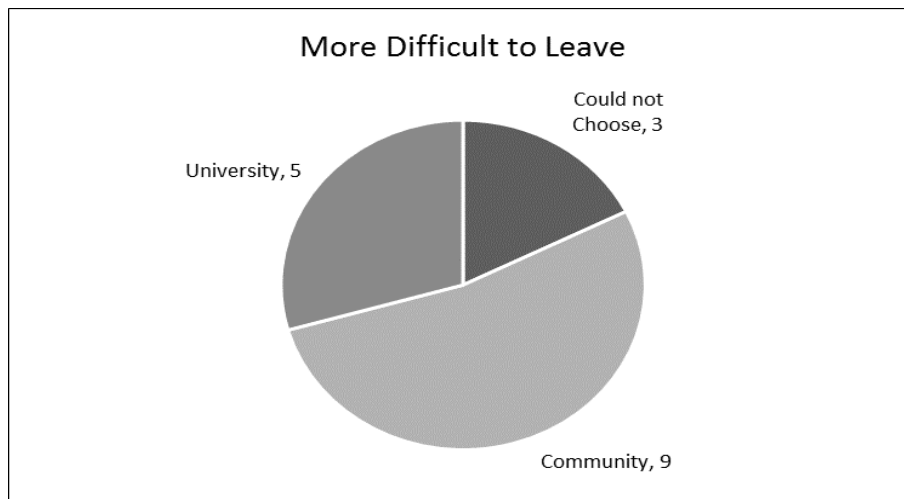
Figure 14. More difficult to leave.
Note: This graph shows the results of the participants' responses to which is more difficult to leave their university or community.

Reasons university would be difficult to leave. For the reasons why they chose their university as being more difficult to leave, the four participants generated nine references. The primary reason was their attachments to their university (5). The participants mentioned enjoying working with the people at their university (1) and considering their coworkers as their community (1) and

124

their friends (1). Due to these attachments, the participants found leaving their coworkers (3) and the people they worked for more difficult (1). Other comments included having invested too much time to leave (1) and not having a strong attachment to their community (1). Halle, aged 49 non-White female with an associate degree and over 8 years of experience, remarked,

> Where I'm at now, the people that I work with are just amazing, so I've got a good manager, and I've learned so much more about the university because I used to work in another department, and the department I'm working for now has been a huge change, and I've gotten to know a lot more people and I think it would just be hard for me to just leave the people I work for right now and work with. Because we have a good working relationship. That would be the difficult part, because you never know what you get when you start thinking about, oh I need to make more money, you have to kind of weigh your pros and cons about your decision, because there has been other job announcements, job opportunities that I thought about applying for, but with my skills and my experiences, although I know I would qualify for them, where I'm at right now it would be really hard for me. Basically, the people I work for and the people I work with (Halle, personal communication, October 7, 2014).
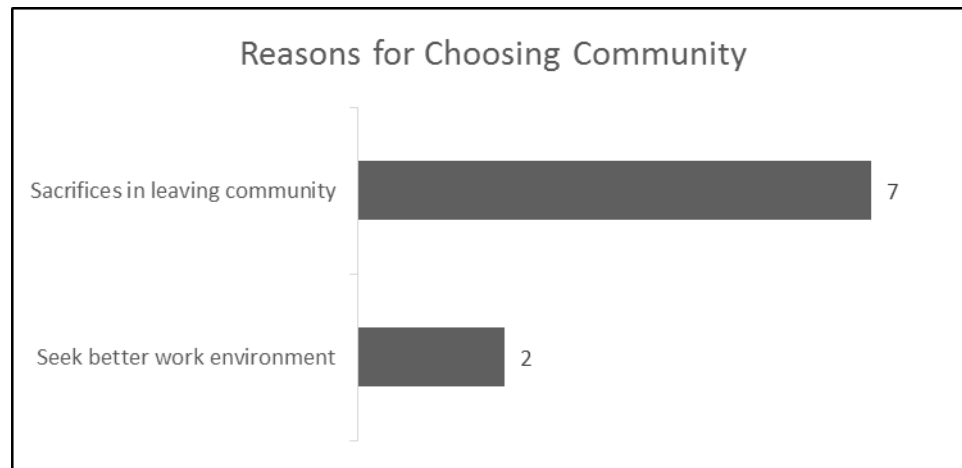
Figure 15 shows the themes that emerged as the reasons why the participants chose their universities.
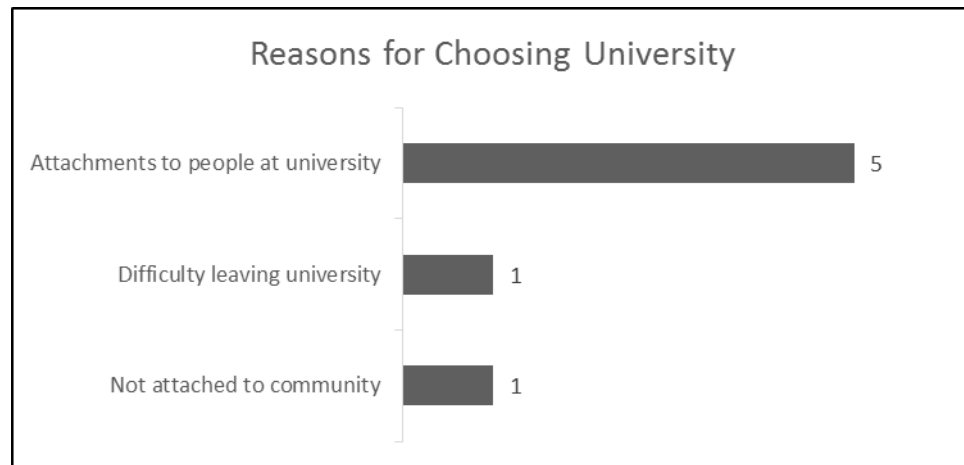
Figure 15. Reasons for choosing university.
Note: This graph displays the themes and participant counts for the reasons why the participants chose their university as being more difficult to leave.

Reasons community would be more difficult to leave. For the reasons why they chose their community as being more difficult to leave, the nine participants generated 22 references. The reasons were the sacrifices they would make in leaving their community (7) and the desire to find better work environments (2). Figure 16 shows the themes that emerged as the reasons why the participants chose their communities.

Figure 16. Reasons for choosing community.
Note: This graph displays the themes and participant counts for the reasons why the participants chose their community as being more difficult to leave.

1. Sacrifices in leaving community. Seven participants mentioned the sacrifices they would make in leaving their community. Five of the seven participants indicated that leaving would be a sacrifice for their families, due to their support system for their children and attachments to their friends and family in the community. Other comments included having to make and trust new friends, feeling their community is part of their home life, and finding it difficult to find a better one to live in. Dexter, a White male aged 36 with a bachelor's degree and nearly ten years employment, stated,

> I think that would be harder because it would put some strain on them, but it would be a huge sacrifice for them to leave their friends and family and their established relationships in this community. I think that would be

harder in the long run, for me personally it wouldn't matter, it would certainly affect them and that would in turn affect me. They would have no problem at all with me leaving the university if there was another position in the community that I could go to (Dexter, personal communication, October 10, 2014).

2. Seek better work environments. Two participants noted that they chose their community due to their dissatisfaction with their work environments. One participant felt their workplace had become too stressful. Sam, a 34 year old White male with a bachelor's degree and 9 years of employment at his university, stated,

For the longest time, they were tied together for me, so they were part and parcel. Now, I've slowly began releasing my emotional attachments from the university to make it easier to divorce myself from this place. I think at this point, it would be much harder to leave my community than it would be to leave my university (Sam, personal communication, October 9, 2014).

Reasons for inability to choose. For the reasons why they were unable to choose between their university and their community as being more difficult to leave, the three participants generated 12 references. Figure 17 shows the themes that emerged as the reasons why the participants were unable to choose.
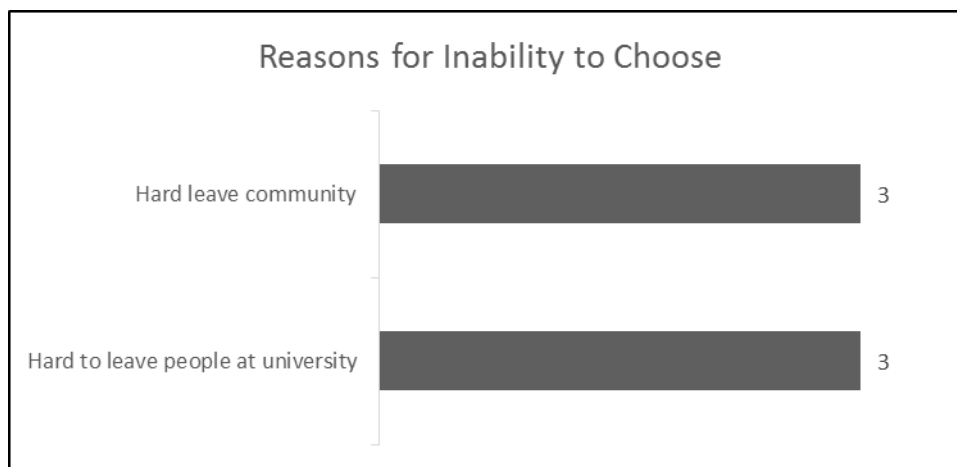
Figure 17. Reasons for inability to choose.
Note: This graph displays the themes and participant counts for the reasons why the participants chose their community as being more difficult to leave.

On one hand, the three participants felt their community would be difficult to leave. Their comments included having to find another job, to relocate, and to leave behind their neighborhood, family, and friends. At the same time, the three participants felt their universities would be difficult to leave. Two participants would find it hard to leave their coworkers. One participant chose the university because of her feelings towards her community. She indicated preference to live in a community that shared her values. Gretchen, aged 50 non-White female with some college and 25 years of professional experience, stated,

> They would both be difficult. I mean, my community, I've been here thirty-seven years. I've been involved with my community. I can't go anywhere without someone knowing me or me knowing them. I feel the same way about the university. I've been there seventeen years and I know everybody practically. I couldn't choose; I couldn't (Gretchen, personal communication, October 6, 2014).

Research Question 3

The third research question inquired as to the extent job embeddedness, its six dimensions, and intentions to stay varied between IT professionals and non-IT professionals in public higher education. To examine this question, the researcher performed independent samples *t*-tests using the quantitative data from the electronic survey. Using the independent samples *t*-test, the researcher compared the means between the groups of IT professionals and non-IT professionals for overall job embeddedness, its dimensions, and turnover intentions. These groups were dichotomous in that the participants belonged to one group only. All effects are reported at the .05 level of significance. Table 15 shows the Group Statistics from the analysis including the occupation groups, number of respondents, means, standard deviations, and standard error means for each variable.

Table 15

Group Statistics

Variables	Occupation Group	*N*	*M*	*SD*	SE Mean
Overall Job embeddedness	IT Professional	207	3.08	0.05	0.03
	Non-IT Professional	920	3.13	0.42	0.01
Links-to-community	IT Professional	207	1.52	0.33	0.02
	Non-IT Professional	920	1.58	0.37	0.01
Sacrifice-to-community	IT Professional	207	3.81	0.76	0.05
	Non-IT Professional	920	3.84	0.72	0.02
Fit-to-community	IT Professional	207	4.15	0.78	0.05
	Non-IT Professional	920	4.15	0.76	0.03
Fit-to-organization	IT Professional	207	3.50	0.77	0.05
	Non-IT Professional	920	3.63	0.76	0.03
Links-to-organization	IT Professional	207	1.81	0.69	0.05
	Non-IT Professional	920	1.72	0.65	0.02
Sacrifice-to-organization	IT Professional	207	3.38	0.71	0.05
	Non-IT Professional	920	3.43	0.63	0.02
Intention-to-stay	IT Professional	207	2.47	1.23	0.09
	Non-IT Professional	920	2.31	1.11	0.04

Table 16 shows the results of the independent samples *t*-tests for each variable. The independent samples *t*-tests revealed a significant difference in the means between non-IT professionals and IT professionals for fit-to-organization and links-to-organization. For fit-to-organization, the means were higher for non-IT professionals (*M* = 3.63, *SE* = .02) than IT professionals (*M* = 3.49, *SE* = .05). The overall *t* result for fit-to-organization was significant (*t*(303.51) = -2.31, *p*=.02). This result inferred that non-IT professionals felt a better fit with the organization as compared to IT professionals.

Table 16

Independent Samples T-test Results

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Overall Job embeddedness	Equal variances assumed	0.486	0.486	-1.58	1125	0.12	-0.0522	0.03311	-0.11715	0.01278
	Equal variances not assumed			-1.49	289.299	0.14	-0.0522	0.03494	-0.12095	0.01658
Links-to-community	Equal variances assumed	4.026	.045	-2.11	1125	.04	-.05965	.02827	-.11511	-.00418
	Equal variances not assumed			-2.27	332.567	.02	-.05965	.02633	-.11143	-.00786
Sacrifice-to-community	Equal variances assumed	.135	.714	-0.58	1125	.56	-.03257	.05618	-.14280	.07766
	Equal variances not assumed			-0.56	296.510	.57	-.03257	.05783	-.14637	.08123
Fit-to-community	Equal variances assumed	.245	.621	-0.04	1125	.97	-.00244	.05883	-.11786	.11298
	Equal variances not assumed			-0.04	299.926	.97	-.00244	.05988	-.12028	.11540
Fit-to-organization	Equal variances assumed	.054	.816	-2.33	1125	.02	-.13749	.05889	-.25305	-.02194
	Equal variances not assumed			-2.32	303.514	.02	-.13749	.05928	-.25415	-.02084
Links-to-organization	Equal variances assumed	.805	.370	1.74	1125	.08	.08720	.05025	-.01140	.18579
	Equal variances not assumed			1.67	293.294	.10	.08720	.05229	-.01571	.19010
Sacrifice-to-organization	Equal variances assumed	3.393	.066	-1.00	1125	.32	-.04964	.04962	-.14700	.04773
	Equal variances not assumed			-0.92	282.123	.36	-.04964	.05379	-.15553	.05625
Intention to Stay	Equal variances assumed	4.570	.033	1.81	1125	.07	.15857	.08748	-.01306	.33021
	Equal variances not assumed			1.70	286.502	.09	.15857	.09325	-.02498	.34213

For links-to-community, the means were higher slightly for non-IT professionals ($M = 1.57$, $SE = .01$) than IT professionals ($M = 1.51$, $SE = .02$). The overall t result for links-to-community was significant ($t(1125) = -2.11$, $p=.04$). This result suggested that the non-IT professionals felt more attachment to their community than IT professionals did.

For the remaining variables, overall job embeddedness, links-to-organization, sacrifice-to-organization, fit-to-community, sacrifice-to-community, and intentions to stay, the t-tests showed that no statistical difference in their means. These results suggested the non-IT professionals and IT professionals were not statistically different in their perceptions regarding these variables.

Summary of the Findings

In terms of the extent to which job embeddedness influenced the intentions-to-stay among public higher education employees, the linear backward stepwise regression revealed that the four of the six job embeddedness dimensions predicted the employees' intentions to stay. The linear combination of sacrifice-to-community, fit-to-organization, links-to-community, and sacrifice-to-organization predicted the intentions to stay among individuals. Additionally, the model suggested that the sacrifice-to-organization and fit-to-organization were the most significant predictors. The model accounted for close to one-third of the variance in these individuals' intentions to remain with their employer.

In regards to how public higher education employees perceived their job embeddedness on intentions to stay, the Thematic Content Analysis revealed that work-related and non-work related factors that contributed to their intentions to stay. The primary work-related factors were their feelings toward their university, perceptions toward their jobs, benefits, and coworker relations. However, the university culture, job related reasons, and better compensation had the potential

for these employees to seek employment elsewhere. For the non-work related factors, the participants chose to remain in their communities due its favorability, its connections to their families, and the length of time in the community. Potential reasons for leaving their communities were to seek better communities, to move closer to their family, and to seek better employment opportunities. However, several participants indicated not intending to leave their communities. Lastly, over half of the participants would rather leave their universities as opposed to leaving their communities. While close to a third of the participants felt it would be more difficult to leave the connections and attachments they had to their universities. Less than 20% of the participants were unable to choose or chose both would be difficult to leave.

In terms of the extent to which non-IT professionals differed from IT professionals on job embeddedness and intentions to stay, the groups differed significantly on the fit-to-organization and links-to-community. The results suggested that the non-IT professionals felt a better fit with their organization and felt more attached to their communities as compared to IT professionals. Overall, the groups did not differ significantly in their overall job embeddedness and intentions-to-stay

CHAPTER 5: DISCUSSION/SUMMARY/CONCLUSION

Chapter 5 focuses on the discussion of the findings from the study. This section presents a summary of the findings, discussion of the research questions, and implications for practice. This section concludes with the implications for future research.

Summary of the Study

The current economic landscape is creating challenges for many organizations to retain key talent. At this time, the economy is recovering, baby boomers are retiring, and competition is increasing. For public institutions of higher education, these factors create major obstacles to surmount. The viability of these organizations, especially public institutions, will depend greatly on their retention policies. Devising effective retention policies requires empirical evidence to inform the decision making process. To this end, understanding the reasons employees choose to remain with employers and the reasons they might leave provides critical information in the formulation of these retention policies. As such, the primary goal in this study was to understand the factors that contributed to employees choosing to remain with their employers.

This study had three purposes. The primary purpose was to determine predictive ability of job embeddedness on the retention of public higher education employees. A secondary purpose of this study was to explore work related and non-work related factors that facilitated or detracted from public higher education employees' job embeddedness. Lastly, this study sought to determine whether the intentions to stay differed among highly skilled workers, such as information technology professionals, and other workers, such as non-information technology professionals, based on their job embeddedness.

Three research questions guided this study. The first research question examined the extent to which job embeddedness influenced the intentions-to-stay among public higher education employees. The second research question explored how public higher education employees perceived their job embeddedness on intentions to stay. The last research question examined the extent to which non-IT professionals differed from IT professionals on job embeddedness and intentions to stay.

An invitation to the study was sent to approximately 12,500 employees, who were employed by the CSU system, represented by the CSUEU union and had email addresses. Over 1,300 employees (1,342) took the 62-item survey, which was available electronically. A sample of 1,127 participants was obtained for a response rate of 10.7%. Over 600 survey respondents agreed to participate in the qualitative phase of the study. The researcher chose 17 participants for semi-structured interviews based on several factors.

The survey responses were analyzed using quantitative methods. The researcher used qualitative methods to analyze the interview data. The survey instrument collected demographic data and job embeddedness data using scaled-items. The demographic data was analyzed using frequency and descriptive statistics. The job embeddedness data were analyzed using statistical analyses. The researcher performed a Thematic Content analysis to analyze the interview data.

The study revealed three key findings. First, the job embeddedness construct predicted the retention of employees in public higher education. Second, the qualitative analysis revealed that on- and off-the job embeddedness factors played significant roles in the respondents' choices to remain with their employer.

Third, non-IT professionals differed from IT professionals on job embeddedness and intentions to stay.

Discussion of Demographic Characteristics

The goal of this study was to examine the perspectives of public higher education employees on job embeddedness and intentions to stay. Additionally, this study investigated the differences in job embeddedness and intentions to stay between information technology professionals and non-information technology professionals. To this end, the researcher recruited participants from the California State University (CSU) system.

The geographic diversity of the CSU system provided a rich context in which to understand the effects of community embeddedness on the intentions to stay among these public employees of higher education. The CSU system has campuses throughout the California with Humboldt State University being the northern most campus located in Eureka. The most southern campus was San Diego State University, which is located in San Diego (California State University System, n.d.-b). Each community within these regions varied in terms of the climate, amenities offered, and proximities to conveniences and leisure activities. Prior research showed that off-the job embeddedness influenced the retention of employees (Mitchell et al., 2001).

The CSU system consists of twenty-three campuses and the chancellor's office. Although each institution were committed the educational mission of the CSU system, it is conceivable that each institution varied in terms of their organizational culture. Organizational culture can influence employees' perceptions of on-the job embeddedness (Mitchell et al., 2001). Additionally, the employees' perceptions of job fit affects their on-the job embeddedness (Mitchell

135

et al., 2001). The CSU system uses a classification system to define the knowledge, skills, and abilities requirement for each occupation.

According to the Profile of CSU Employees: Fall 2013, the CSU employed 32,291 full-time employees (California State University, 2013). The majority of these full-time employees were staff (60.2%) followed by faculty (35.5%) and management (4.4%). Employees in staff positions worked in professional / technical occupations, office / administrative support, service occupations, and construction / maintenance / transportation occupations. Of the staff positions, professional / technical occupations (34.8%) represented the second largest occupational group. IT professionals fall within the professional / technical occupations (California State University, 2013). This broad range of occupations provided a variety of contexts in which to explore the employees' perceptions on job fit, which affects their on-the job embeddedness and intentions to stay.

This study employed a mixed-method, sequential embedded design. As such, the study used two samples, one for each phase. In the first phase, the participants were primarily female (72.2%) and White (62.4%). The participants ranged in age from 21 to 78 years of age, with the average age being 46.4 years. In comparison to the CSU system, the full-time employees were 51.7% women and 55.3% White. The differences indicated that the sample over represented women and Whites. Additionally, the sample was somewhat over representative of older employees in comparing the sample median age of 46.4 years to the CSU's median age of 48.3 years. These over representations may limit the generalizability of the quantitative findings.

Although data on the education level, length of employment, and composition of IT occupations were not available from the CSU, close to two-thirds (66.6%) of the participants possessed a bachelor's degree or higher. The

participants' length of employment with their university ranged from less than a year to over 46 years, with the average length of employment being 11.3 years. The majority (81.6%) of the participants worked in non-IT occupations.

In the second phase, the sample was over representative of women and under representative of Whites. The participants were 64.7% (11) women and 35.3% White (6) as compared to the demographics of full-time employees in the CSU system, which were 51.7% women and 55.3% White. The participants ranged in age from 23 to 62 years of age with an average age of 45.6 years. The median age for the sample was slightly lower that the CSU's median age of 48.4 years. As such, the composition of this sample may limit the generalizability of the quantitative findings.

Again, employee data were not available from the CSU system on the education level, length of employment, and composition of IT occupations. Over 70% (12) of the participants possessed a Bachelor's Degree or Master's Degree. Table 8 also shows the educational breakdown of the participants. The participants' length of employment with their university ranged from less than 2 years to over 21 years, with the average length of employment being 11.3 years. The majority (11) of the participants worked in non-IT occupations.

Discussion of Research Questions

This section includes a discussion of the results of each research question. The section concludes with a summary of the discussion.

Research Question 1: Influence of Job Embeddedness on Intentions to Stay

The first research question examined the extent to which job embeddedness influenced the intentions to stay among public higher education employees. The

statistical analysis revealed that on-the job embeddedness (sacrifice-to-organization and fit-to-organization) and off-the job embeddedness (sacrifice-to-community and links-to-community) influenced the employees' intentions to stay. Together these four job embeddedness dimensions accounted for close to one-third of the variance in these individuals' intentions to remain with their employer.

Strongest predictors. On-the job embeddedness played a significant role in the reasons why the employees chose to stay with their employers. The strongest predictors of their retention were sacrifice-to-organization and fit-to-organization. This finding suggested that employees who perceived greater costs of quitting and felt a better fit with their organization were more likely to remain with their employer.

Potential costs that employees working in public higher education would consider are their health benefits, retirement plans, and flexible work schedules. These individuals typically choose to work in public higher education because of the generous retirement benefits, which in many cases become available after 20 years of service (Smith et al., 2011). The non-portability of their retirement benefits may represent a significant sacrifice for the employees if they left their university or more specifically, the CSU system. Other costs associated with leaving are the risks of having to pay higher premiums for health insurance or higher contributions for retirement plans if they left for another employer outside of the CSU system. Other benefits, these employees would forego include educational assistance, such as scholarships and fee waivers, and flexible work schedules. Additionally, severing ties with coworkers and clients could pose substantial deterrents for them leaving.

Organizationally, public institutions differ from private organizations. Public institutions tend to provide jobs that are secure and low risk (Jiang et al.,

2012). As such, employees working for public institutions experience the benefits of having job security and stable employment. Public employees tend to be motivated more by intrinsic factors, such as having interesting job assignments and serving others (Jiang et al., 2012). For public employees working in higher education, these intrinsic factors include the opportunity to work in an academic setting (Dewitt, 2002), to supporting students, and to share the educational mission of their university.

From a job fit perspective, employees consider the extent to which their jobs match their personal characteristics. The job characteristics that contribute to their perceptions of compatibility are the required knowledge, skills, and abilities. The better the compatibility between the job and personal factors the better the job fit (Mitchell et al., 2001). Public employees tend to place a greater value on the extent to which their values match those of their organization and job (Jiang et al., 2012).

The predictive abilities of sacrifice-to-organization and fit-to-organization on employees' intentions to stay were consistent with prior job embeddedness research. Van Dyk et al. (2013) had a similar finding in their study involving medical and IT professionals working for a private organization. In the study, the researchers examined whether the satisfaction of medical and IT professionals with retention factors predicted their job embeddedness. Their findings revealed that fit-to-organization and sacrifice-to-organization were major predictors in the retention of employees. Further, their findings suggested that highly embedded participants were more likely to stay, due to their satisfaction with the characteristics of their job, such as autonomy, flexibility, and opportunities to work on challenging and interesting tasks.

In contrast, Young et al. (2013) examined the ability of job embeddedness to predict the retention of governmental extension agents. Their study revealed that only sacrifice-to-organization had the highest predictive ability on the retention of these government agents. Ramesh and Gelfand (2010) explored the job embeddedness and cultural differences on intentions to stay. Their study revealed that fit-to-organization, specifically the job fit aspect, was more predictive of intentions to stay among employees in the United States.

Lesser predictors. To a lesser extent, off-the job embeddedness predicted the intentions to stay among employees in public higher education. The analysis revealed that the off-the job embeddedness dimensions: sacrifice-to-community and links-to-community and predicted the intention to stay among these employees to a lesser extent.

Sacrifice-to-community was a moderate indicator of intentions to stay, despite having lesser predictive ability. Typically, sacrifice-to-community considered the employees' perceptions on the ease in which they could break the attachment to their communities, as in the case of relocation (Mitchell et al., 2001). The costs of leaving their communities included walking away from communities that were rich in culture, safe, close to leisure activities, and other conveniences and amenities. This finding suggested that the greater the perceived cost of leaving their community the more likely the employee would remain with their employer.

Employees working for the CSU system live throughout California. The communities represented by these employees vary considerably in the climate, affordability, proximity to culture and leisure activities, as well as the travel times to work. Additionally, the communities ranged from major metropolitan cities to rural, farm communities. As such, the predictive ability of sacrifice-to-community

is logical considering the diverse representation of communities in the CSU system.

However, job embeddedness research on the influence of sacrifice-to-community on intentions to stay was mixed. On one hand, prior research supported the relationship between sacrifice-to-community and intentions to stay. Young et al. (2013) examined the job embeddedness of extension agents in two different states. The results showed that the job embeddedness differed significantly between extension agents living in different states. This result suggested that the perceived costs of leaving their communities varied by state.

On the other hand, the other research did not support the relationship between sacrifice-to-community and intentions to stay. Ramesh and Gelfand (2010) explored the influence of job embeddedness between individualistic and collectivistic countries. The study involved participants living in the United States and India. The results of the study revealed that the country did not moderate the relationship between sacrifice-to-community and turnover. This result suggested that the costs of leaving their communities were not dependent on contextual differences, such as culture.

Links-to-community was a weak indicator of intentions stay and had lesser predictive ability. Links to Community considered the attachments that people have outside of their organization (Mitchell et al., 2001). These attachments included employee connections to their family, church, local organizations, or friendships with other members within their community (Mitchell et al., 2001). This finding suggested that employees were more likely to remain with employer when the employees were highly embedded in their communities.

This lesser predictive ability may be explained by the moderating effects of off-the job embeddedness on the relationship between on-the job embeddedness

and intentions to stay. Dawley and Andrews (2012) specifically examined the predictive validity of on- and off-the job embeddedness on retention. Their findings were consistent with this present study in that on-the job embeddedness was a stronger predictor of intentions to stay. However, their findings revealed that off-the job embeddedness moderated the effects of on-the job embeddedness on intentions to stay. The researchers stated that "the more embedded employees are off the job, the less effect their level of on-the job embeddedness will have on their intentions to turnover" (Dawley &Andrews, 2012, p. 479). In other words, employees exhibiting high levels of off-the job embeddedness resulted in their on-the job embeddedness having a lesser effect on their intentions to stay. The moderating effects of off-the job embeddedness on the relationship between on-the job embeddedness and intentions to stay may explain the lesser predictive qualities of links-to-community in this present study.

Non-predictors. Links-to-organization and fit-to-community were not significant predictors of the employees' intentions to stay. Links-to-organization considered the attachments that the employees developed overtime toward their organization and its people (Mitchell et al., 2001). These organizational links included job involvement, such as the level of engagement the employees had with their peers, team members, and committee members. Additionally, links-to-organization dealt with personal characteristics, such as the employee's age, length of employment, and affiliation with professional organizations (Mitchell et al., 2001). This finding suggested that the attachments that the employees had to their organization was not a predictive factor in the retention of these employees.

On one hand, this result was expected. Intuitively, the demographics of the participants in terms of average age (46.4 years) and length of employment (11.3 years) would suggest that links-to-organization would be more predictive of their

retention. Prior research suggested that age and length of employment were covariates of intentions to stay (Mitchell et al., 2001). However, this present study did not include these demographics in its statistical analysis. The researcher specifically chose to exclude these variables from the job embeddedness model due to these covariate qualities.

On the other hand, this result was somewhat surprising. The mature composition of this sample suggested that these participants would have developed attachments to their organization and coworkers over time. Further, these attachments would have affected their retention. However, the compartmentalization of higher education institutions may have a played a role in the number of attachments that these participants developed. Depending on the employees' roles and spheres of influence their interactions may have been limited to the coworkers in their specific departments. The nature of staff work may lend itself to more closely to compartmentalization as opposed to inter-departmental efforts. Additionally, Mitchell et al. (2001) argued that individuals differed in the number of attachment they developed and in the tightness of these attachments. Other job embeddedness research confirms this finding. Young et al. (2013) found that links-to-organization was a weaker predictor of intentions to stay among extension agents. The researchers stated, "The failure to develop meaningful work relationships could indicate the employees are less likely to stay with their present work situation" (Young et al, 2013, p. 2).

Fit-to-community considered the employees' perception on how well their communities or external environments fit their goals, values, and aspirations (Mitchell et al., 2001). Compatibility with the community involved the employees' perception of the convenience and amenities their surrounding area provided. These factors included the availability of entertainment, outdoor

activities, and churches are other relevant culture. Other factors included the weather, transportation, and schools (Mitchell et al., 2001). This finding suggested that the compatibility of the employees' communities was not a predictive factor in the retention of these employees. This result was somewhat expected.

The sample represented participants from diverse communities ranging from rural communities to major metropolitan cities. As such, the composition of these communities varied in terms of the amenities offered, location of conveniences and leisure activities, and weather. Depending on the participants' requirements for compatibility with their communities, the extent to which they felt a match would vary among these individuals. Young et al. (2013) found that the fit-to-community differed significantly between extension agents located in different states.

Research Question 2: Effects of On- and Off-the Job Embeddedness Factors on Intentions to Stay

The second research question was qualitative in nature. It inquired about how public higher education employees perceived their job embeddedness on intentions to stay. The interview participants answered questions regarding their universities and communities, such as the reasons they stayed and reasons they would leave. Additionally, they responded to a question regarding which would be more difficult to leave their university and community. The qualitative analysis revealed that the emergent themes related to all six of the job embeddedness dimensions: fit-to-organization, links-to-organization, sacrifice-to-organization, fit-to-community, links-to-community, and sacrifice-to-community.

Reasons they stayed with their universities. Four major themes emerged as the key reasons the participants chose to remain at their universities. These

primary reasons were their feeling toward their organization, perceptions regarding their jobs, coworker relations, and their benefits. These themes related to the three on-the job embeddedness dimensions: fit-to-organization, links-to-organization, and sacrifice-to-organization.

Fit-to-organization. The employees' attitudes toward their universities and perceptions regarding their jobs emerged as the major themes relating to fit-to-organization. Fit-to-organization considered the congruence between the individual and the organization (Mitchell et al., 2001). This congruence encompassed organizational fit and job fit.

Organizational fit. Organizational fit involved the compatibility between the organizational culture and the individual's personal requirements (Mitchell et al., 2001). In terms of organizational fit, the employees' attitudes towards their universities suggested congruence between the universities' cultures and their personal requirements. Over 80% of the participants responded with positive remarks regarding their organizational fit. The employees expressed that their universities provided great environments in which to work. Their comments included statements, such as "it's one of the best places in the [city] to work," "I really enjoy working on the campus in the education field" and "The environment on the campus is very positive."

The interview participants felt that the university culture facilitated the development of close campus ties and the engagement of others with similar interests. One participant remarked, "I enjoy being around people who are also interested in learning and growing things" (John, personal communication, October 8, 2014).

Other interview participants felt their university settings afforded them opportunities to support and help others. Emily, a 39 year old, non-White female with a bachelor's degree and 16 years of professional experience stated

> Being able to help people because I don't really specifically work with students too much in my position that I'm in now, but just helping the faculty and just with anything that's mostly with different kind of pay issues, but getting things resolved for them or completing different kind of tasks that then has an effect on students down the line. That's rewarding to know I'm part of that (Emily, personal communication, October 7, 2014).

More importantly, these employees felt their university culture aligned well with their personal values and beliefs. John, a White male, 47 years of age, with a bachelor's degree and 7 years in his position, remarked,

> I would say it's important to me to be a part of an organization that aligns well with my own beliefs or goals. I consider myself a lifelong learner. Working in a college environment plays into that pretty well (John, personal communication, October 8, 2014).

The interview participants' comments suggested high embeddedness for their organizational fit. This finding was consistent with other research on job embeddedness. In a qualitative study involving HR practitioners working for a public agency, Holmes et al. (2013) revealed that the primary reasons the HR practitioners remained with their employers was due to their feelings of compatibility between their role and their organization, i.e. fit-to-organization.

Job fit. On the other hand, job fit dealt more with the match between the knowledge, skills, and abilities required for the job and those possessed by the individual (Mitchell et al., 2001). From a job fit perspective, the employees' perceptions towards their jobs suggested compatibility between their knowledge, skills, and abilities and those required for the job. More than three-fourths of the employees expressed positive remarks regarding their job fit. The employees found their jobs to be rewarding, stable, and flexible. Their comments included

"the job I do matters," "the work we do is very exciting to me," and "I really enjoy what it is I do, and it's, to me, just a great environment."

Some employees felt that their skills contributed to the university's overall mission and that their skills were valued by their universities. Betty, a non-White female, 55 years of age, with a master's degree and 13 years in her position, stated

> I am the kind of person that likes to feel like I'm contributing to the greater good. I want to feel like what I'm doing every day is making things better or helping people in some way (Betty, personal communication, October 10, 2014).

This finding suggested that the employees felt that the characteristics of their job were compatible with their knowledge, skills, and abilities. Van Dyk et al. (2013) examined the role of specific retention factors on the embeddedness of 208 medical and IT employees. In their study, they found that highly embedded participants were more likely to stay, due to their satisfaction with the characteristics of their job, such as autonomy, flexibility, and opportunities to work on challenging and interesting tasks.

Links-to-organization. Another reason the participants stayed with their university was their coworker relations. This theme related to links-to-organization. Over one-third of the employees stayed with their university because of their relationships with their coworkers. The participants expressed that they found their coworkers were enjoyable. They felt appreciated by their coworkers. Lastly, their coworkers were easily to work with. Liz, non-White female aged 43 with a bachelor's degree and over 21 years at her university stated

> The people I work with are really nice. I'd rather have peace of mind than the money, even though the money would be nice. The former is just more important at this point (Liz, personal communication, October 8, 2014).

This emergent theme, coworker relations, suggested that the participants were highly embedded. Mitchell et al. (2001) posited that highly embedded

employees possessed more connections to their organization and its people and were more likely to stay. Interestingly, this qualitative finding conflicted with the quantitative findings for this dimension: links-to-organization. In the quantitative phase, the statistical analysis showed that links-to-organization was not a predictor of intentions to stay. However, the qualitative explications from the participants suggested that links-to-organization does play a role in their retention. The discrepancy in these findings may be addressed by the fact that only six participants felt this way. Additionally, the weak predictive ability of links-to-organization on retention was found in other job embeddedness research (Young et al., 2013).

Sacrifice-to-organization. Another major theme in why the participants chose to stay was the sacrifice associated with foregoing their benefits. This theme related to sacrifice-to-organization. Over one-third of the employees felt that the benefits, such as the health insurance and pension plans, were good. John, White male aged 47 with a bachelor's degree and close to 7 years at his university, stated

> In a more broad terms, the long-term benefits of working at this organization appeal to me. The idea of being able to [retire]... if I work here a long time, I'd have a pension, or I also have really good benefits while I'm here. Those are all things that are positives (John, personal communication, October 8, 2014).

They mentioned the value and personal benefit of the educational assistance, namely fee waivers, for themselves and family members. Cabbage, Hispanic female aged 23 with a bachelor's degree and 6 years with her university, stated

> Then the other thing that also helped me, after like a year of just taking a couple classes with [the] benefits [that the university] offers, I was also able to start [pursuing] my Masters … I'm taking it at another CSU and it's

going to be completely online, so that was another big benefit (Cabbage, personal communication, October 4, 2014).

This finding suggested that these participants were highly embedded. The greater the perceived cost of leaving the more likely employees will remain with their employer (Mitchell et al., 2001). This finding corroborated the results of the quantitative analysis. In the quantitative phase, the results revealed that sacrifice-to-organization was the strongest predictor of intentions to stay. The predictive qualities of sacrifice-to-organization were confirmed in other job embeddedness research (Van Dyk et al., 2013; Young et al., 2013).

Reasons they would leave their universities. Four major themes emerged as reasons that would leave the participants to leave their universities. These themes were better university culture, job-related reasons, better compensation, and relocation. These themes related to the job embeddedness dimensions: fit-to-organization and sacrifice-to-organization.

Fit-to-organization. While the majority of the employees viewed their organizations' fit as positive, over half the employees expressed the organizational fit as a potential barrier to their intentions to stay. The major sub-themes dealt with their feelings of appreciation and value, support from their administrators, and lack of inclusivity.

In terms of their feelings of appreciation and values, the participants expressed that their organizational culture failed to show appreciation or value for their contributions and to make them feel connected to the university. A few employees felt their university culture placed a greater emphasis on faculty contributions as opposed to staff contributions. This discrepancy in emphasis led to a "class divide" between faculty and staff. As such, these employees felt marginalized in the value of their contributions to their universities' missions.

Sam, a 34 year old, White male with a bachelor's degree and close to 9 years of employment commented that

> There is a very strong divide between faculty and staff. It shows its way in many forms. One of the immediate is that the staff are often asked to support the faculty. In many ways, that is our role, but we're asked to support them morally as well, to back what they're doing, to feel their need. In a lot of ways, we do. We show up for rallies and what not.

> Staff don't get rallies. The faculty don't show up to support the staff, and say hey these guys need more money. We constantly get the back seat. At a certain point, that's a class divide. If you're asking the lower class to support the upper class, but you're not asking the upper class to support the lower class, the lower class just leaves or find another way (Sam, personal communication, October 9, 2014).

This finding suggested low embeddedness for these participants and a higher likelihood of them leaving. University culture is critical in developing appropriate social norming and behavior. In organizational cultures that are supportive, appreciating and valuing employees' and their contribution increased their embeddedness and thereby, their retention. This relationship between supportive cultures and retention was evidenced in other job embeddedness research.

In a qualitative study, Holmes et al. (2013) assessed the embeddedness and retention of 18 human resources practitioners. Over half of the participants (56%) stayed with their employers because of the value of their HR work. Lastly, a few participants felt their university culture inhibited the assimilation of newcomers. Blue, 46 year old, non-White, female with 31years of professional experience and some college, commented

> However, as you get higher up within the faculty, as you move to higher up in the chain, every now and again, there's those people who have been used to things running a certain way and they don't like it when the new card, I guess to some extent, shows them up. It's not that we're necessarily showing anybody up it's just that a lot of us have come from private industry or we come from a work ethic that is a lot more about collegiality

and getting things done and sometimes people don't like that and they give you a hard time for it (Blue, personal communication, October 8, 2014).

This finding suggested that as new employees these participants felt less embedded and more likely to leave. Allen (2006) in a study involving 222 employees working for a large financial services organization found that specific socialization tactics led to higher levels of embeddedness for new employees and thus reduced new employee turnover.

Sacrifice-to-organization. At the same time, the employees indicated that job-related factors, compensation, and relocation had the potential for them to seek employment elsewhere. These three emergent themes related to sacrifice-to-organization. Sacrifice-to-organization considered the ease in which employees could sever ties with their organization due to relocation or to changing employers. This dimensions involved job related factors, such as compensation, benefits, training and development, and pension plans (Mitchell et al., 2001).

Job-related factors. First, over 41% of the employees commented they would leave their universities for job related reasons. The primary job-related reason was the lack of the training and development opportunities, as well as growth opportunities. Bob, a 54 year old, Black male with a master's degree and 13 years of professional experience stated

> My certification I did it on my own. I did not count on the university to pay for it or to pay for the courses I took or to pay for any kind of training material, I did it on my own. In other places, I have some colleagues working in other places and everything is covered for them. Right now, I belong to [a professional association]. Sometimes I have to take a day off to attend meetings there and I pay all my fees myself. Those are the key things that are making me think about leaving if an opportunity [were to] come up (Bob, personal communication, October 7, 2014).

This finding suggested that the participants were more likely to leave for better opportunities for growth and professional development. Opportunities for

training and development are critical factors in employee retention. Training and development opportunities include professional development, job-specific training, as well as, chances to apply newly acquired skills in their workplaces. In the absence of training and development opportunities, employees begin to feel stagnated in their knowledge, skills, and abilities, which could lead to lower embeddedness and increased intentions to leave.

This finding was consistent with prior research on job embeddedness. Van Dyk et al. (2013) sought to examine the role of specific retention factors on the embeddedness of medical and IT employees. The study involved 206 participants, identified as possessing scarce skills. Their study results suggested that highly embedded employees were more likely to stay, due to their satisfaction with their opportunities to grow and develop new skills. Their results suggested that embedded medical and IT professionals favored opportunities for training and development over other retention factors. In a qualitative study involving, Holmes et al. (2013) explored the perceptions and lived experiences of 18 human resources practitioners working for the federal government, the majority of the participants (61%) expressed the need for additional training and mentoring as factors contributing to lower embeddedness.

Compensation. Second, the interview participants indicated they would risk leaving their university for better compensation. Their comments included the effects of under compensation. One effect expressed by the participants was not receiving compensation commensurate their knowledge and experience and not receiving cost living adjustments. Another effect the interview participants discussed was how the under compensation made them to feel expendable, unappreciated, and unwanted. Betty, a 55 year old, non-White female with a master's degree and 15 years of professional experience stated

If there's no way for me to continue to work through my salary range, to make a higher income, that reflects and rewards me for my experience and knowledge that I've gained while I'm working here, it makes you feel unwanted, or it doesn't matter.

I feel like it sends a message of we don't care if you're here. Somebody else will take your job, so it doesn't really matter. You or somebody else, we don't care. That feeling of not being appreciated or being under-compensated…

But, I'm also seeing that I may not be able to retire, ever. Not at the salary level that I'm being paid at this time. I have to think about practicality. Do I want to keep working forever, and just figure out what other options I might have that would make that better (Betty, personal communication, October 10, 2014)?

This emergent theme, under compensation, suggested low embeddedness for sacrifice-to-organization. Their concerns suggested that these employees were willing to risk their opportunities at their universities for better compensation. These compensation concerns were consistent with literature on compensation for public employees. In general, public institutions have difficulty offering competitive salaries and benefit packages that would attract or retain these individuals due to rigid state and institutional salary guidelines (Dewitt, 2002). In the past, higher education institutions relied on quality of work life factors, such as working in an academic setting to offset the differentials in salaries offered by private industry (Dewitt, 2002). However, the effects of quality of work life are diminishing in light of the widening gap in salaries being offered (Dewitt, 2002).

The last effect dealt with the inadequacies of and challenges with their compensation system, specifically the In-Range Progression. John, a 47 year old, White male with a bachelor's degree and 7 years of professional experience stated

The pay structure is basically you're just frozen and you're frozen in at what you're hired in at. There isn't really a natural way to increase your pay through tenure other than in-range progressions, which are a real big hassle to do paperwork-wise. It's like this a real hassle. It's hard to actually get it to go through. That leaves you with looking for other positions within the

school. I would say that's something I would want to say. It's a common theme that I hear through other co-workers (John, personal communication, October 8, 2014).

This theme, compensation system, suggested low embeddedness for these employees, which could affect their retention. In the CSU system, the staff employees are represented by several unions based on their classifications. These unions negotiate collective bargaining agreements that determine their compensation. As such, their compensation varied depending on the collective bargaining agreements. Some collective bargaining units specified compensation for salary, general salary increases, merit salary increases, market salary adjustments, and In-range progression (CSU Labor Relations, 2012). The availability of funds and other factors determined the amount of salary increases, if any (CSU Labor Relations, 2012). In lean fiscal years, some employees may not have received a salary increase of any kind.

This finding is consistent with other research involving compensation and retention. Young et al. (2013) found compensation be a factor in the on-the job embeddedness of extension agents. The researchers noted that the average salaries for extension agents were below the national average. They reasoned that this under-compensation contributed to their perceptions of on-the job embeddedness.

Relocation. Third, relocation emerged as the last major factor related to sacrifice-to-organization. The primary reason cited by the employees was leaving due to their spouses' or significant others' being relocated. Other reasons included moving closer to family members. Halle, Halle, aged 49 non-White female with an associate degree and over 8 years of experience, stated

> I would leave, well ... Because my husband actually is the breadwinner, it would probably be because he relocated, you know, he got a job offer out ... I mean somewhere else … Then of course, family, I guess too, you know. If my children decided that they were going to move out of town or settle somewhere, somewhere my husband and I decided to follow, I guess that

would also be another factor in our decision (Halle, personal communication, October 7, 2014).

This finding suggested that off-the job embeddedness influenced employee retention, when geographical relocation was involved. Additionally, this finding was consistent with other job embeddedness research.

Smith et al. (2011) found that military personnel with high levels of off-the job embeddedness were more willing to leave the military to avoid future relocation. Ramesh and Gelfand (2010) expanded the job embeddedness construct to include family embeddedness. The researchers argued that family exerted forces that influenced employees' intentions to stay. Their study confirmed that family embeddedness could predict intentions to stay.

Reasons they stayed in their communities. The participants responded to an inquiry as to why they remained in their communities. The primary reasons the participants remained in their communities were community favorability, family connections, and longevity in the community. These themes related to fit-to-community and links-to-community.

Fit-to-community. The primary reason why the participants chose to remain in their communities was the favorability of their communities. This theme related closely to the fit-to-community dimension. Fit-to-community considered the perceived compatibility or comfort individuals felt with their community and surrounding area (Mitchell et al., 2001). In terms of community favorability, the majority (82%) of the participants discussed the advantages of living in their communities. The participants indicated the importance of having a short commute and being close to leisure activities, such as church, entertainment, and other conveniences. Their comments related to the community favorability included "I have a pretty short commute to work" (John, personal communication, October 8, 2014), "It's convenient for our life outside of work" (Jill, personal

communication, September 29, 2014), and "It's very centralized. Everything [I need] is around [me:] grocery stores, restaurants, movie theaters, [and] good neighbors. It's ideal" (Larry, personal communication, October 9, 2014). Sam, a White male aged 34 with a bachelor's degree and over 13 years of professional experience commented

> This city really does hold a lot of the things that are important to me. I'm very much into say music. I'd go to a concert every day of the week if I could, and this city is a hub for music from around the world. I have so much opportunity to participate in things that matter to me. All the museums…, there's just so much to do here, and there's such a great opportunity to meet so many wonderful people from around the world. That's what keeps me here (Sam, personal communication, October 9, 2014).

The participants' responses suggested that their communities were a good fit and thereby, personally tied them to their universities. These personal attachments to the community suggested high level of embeddedness and a greater intention of staying in their community and potentially their university. Mitchell et al. (2001) posited that the better the fit the more likely individuals felt tied personally to their organization.

Links-to-community. Family connections and longevity in the community emerged as major themes for why the interview participants chose to remain in their communities. These themes related to their links-to-community. Links-to-community considered the normative pressures that family and other social interactions, such as church and local organizations, had on individuals' commitment to their organization (Mitchell et al., 2001).

Family connections. In terms of family connections, the majority of the participants (82%) interviewed were married. In discussing their family connections, they mentioned the responsibilities they had to their spouses, children, and elderly parents. One participant responded, "My parents still live

here, so I'm not too far away from them" (Gretchen, personal communication, October 6, 2014). Nearly half of the participants (8) discussed the importance of their communities to their children. Another participant remarked, "It's just a really nice place to raise kids and has just a real nice atmosphere to it; real friendly place to live" (Emily, personal communication, October 7, 2014). Twenty nine percent of the participants discussed how their family lived in or near their community. In one case, the participant's friends and other social connections lived in the community. The participant stated, "The utmost importance is the family and social connections that I have" (Judy, personal communication, October 10, 2014).

The participants' comments suggested high levels of community embeddedness. Mitchell et al. (2001) posited that "being married, having more tenure, and having children requiring care were all associated with employee's being more likely to stay than to live" (p. 1104).

Longevity. In terms of longevity, several participants (4) mentioned growing up in or nearby the communities in which they lived. One participant stated, "I was born in the city, my husband was born in the city, my kids were born in the city. We have a very deep connection to [this city]" (Blue, personal communication, October 8, 2014).

Other participants discussed the importance of the relationships they had developed over time with the members in their communities. Gretchen, an aged 50 non-White female with some college and 25 years of professional experience, remarked,

> I've lived in my community for thirty-five [years]. This is my second home" and "I can't go anywhere without someone knowing me or me knowing them" (Gretchen, personal communication, October 6, 2014).

157

Other benefits of longevity in their community were the camaraderie the participants shared with other parent's at their children's sports activities and among the members of their local churches. Blue, a 46 year old, non-White female with some college and 31 years of professional experience, remarked,

> It's important for me to give my kids stability. I feel like that I know that they say my kids are very resilient and they can manage with change probably a lot better than adults can, but I think they have their limits as well. For me, I like the fact that they have a place where they can ... they know the people in their community. There's a support system. I mean for example, if your kids are in some kind of sports league or they're part of a musical ensemble you have the ability to call upon them as parents or other people in the program if you'd be able to help out. You can do carpools and that kind of stuff (Blue, personal communication, October 8, 2014).

The participant comments on their longevity in their communities suggested they had developed deep connections to their communities and the people, who lived in them. This finding indicated that the participants had tight attachments to their communities, which suggested high community embeddedness and a greater likelihood of staying (Mitchell et al., 2001).

Reasons they would leave their communities. As to reasons the participants would leave their communities, four themes emerged. The primary reasons for leaving their communities were relocating for their spouse and family (7) followed by seeking a better community (7). Other reasons for leaving the community included finding better employment opportunities. The last theme that emerged dealt with not leaving or not planning to leave their communities. These themes related to fit-to-community and sacrifice-to-community.

Fit-to-community. For fit-to-community, the major theme involved seeking a better community. Forty-one percent of the participants would consider leaving their communities for ones that were more suitable. Three participants indicated that being closer to amenities were important considerations for leaving.

Two participants indicated that shorter commutes to work were factors. Another factor mentioned by two participants was the opportunity for homeownership. John, a White male aged 47 with bachelor's degree and close to 7 years of experience with his university, stated

> The primary factors would be that I would be moving to another, a different community that had … that appealed to my family in terms of the environment, opportunities for my family, proximity to employment or recreation, the potential for more opportunities in terms of lower cost of living.

> In the community I'm in now, I'm not exactly going to go out and buy a house. That's probably true for most of California. If I were to look at in terms of changing my living situation or setting up, finding a location that was more conducive to future growth in terms of the home environment and that, or proximity to other family or friends, proximity to other job opportunities, or recreation, or things that we like to do. Those would all lead into it (John, personal communication, October 8, 2014).

These factors suggested low embeddedness. More importantly, this low embeddedness could potentially lead these participants to leave their universities.

Sacrifice-to-community. For sacrifice-to-community, the major themes included relocating for spouse and family, finding better employment opportunities, and not leaving the community.

Relocation. Forty-one percent of the participants mentioned that relocating for their spouses and family were major factors in leaving their communities. The participants indicated being closer to family members or their parents were important considerations. Other considerations involved leaving their communities to follow their spouses or significant others in the event of their jobs being relocated. In one case, a participant was willing to leave their community to be closer to friends. Another participant mentioned leaving if extenuating circumstances arose, such as needing to care for a family member. Emily, a 39

year old, non-White female with a bachelor's degree and 22 years of professional experience, remarked

> I would probably think it would be related to family needs or something like that, like if something happened that we really had to move closer to other family. My husband's job, I don't really see that changing to go anywhere else, but that might be another factor where if he had to move somewhere else and I'd follow, but I don't think that would ever happen. Those are the only things I can think of that would get us out of this community (Emily, personal communication, October 7, 2014).

These responses suggested the participants placed a greater import on being proximally located to their family than to their communities. Additionally, these responses suggested the participants' willingness to sever ties with their communities and possibly their employer to be closer to family. Mitchell et al. (2001) noted that relocation did not necessarily involve severing ties with the individual's employer. Individuals could move to another community and remain with the same employer. However, Mitchell et al. (2001) asserted that in the event of changing communities the individual would recalibrate their fit. Potentially, this recalibration could affect their fit-to-community.

Employment opportunities. Finding better employment opportunities was another factor the participants considered. Twenty-nine percent of the participants indicated they would consider moving to a community that offered opportunities for better work and work conditions. In seeking better work, the participants wanted opportunities to earn a better living, to find challenging work, and to grow professionally. Other reasons they would seek better work were to find a better job fit or to pursue a different career. Lastly, one participant was willing to leave their community to find employment at another university. In terms of better work conditions, one participant wanted an organizational environment in which the managers were supportive more. Another participant desired a work environment

that fostered creativity. Betty, a 55 year old non-White female with a master's degree and 13 years of employment with her university, stated,

> I mentioned our families that lived here, but most of my family lives somewhere else, so going to be there with them might be a choice, and also moving to a place where those opportunities to make a better living, to find new challenging work would also contribute to that decision (Betty, personal communication, October 10, 2014).

These reasons for possibly leaving their communities suggested that better employment opportunities were an important factor in their embeddedness. These participants were willing to sacrifice their attachments to their communities for the sake of better employment.

Not leaving. The last theme that related to sacrifice-to-community was not leaving their community. Thirty-five percent of the participants responded that either they had no plans to leave their community or leaving their community would be difficult. The participants mentioned that they had lived in their communities to long to leave and that they could not think of anything that would take them away. With difficulties in leaving their communities, two participants mentioned the challenges involved with moving their children away from their schools and friends. One participant noted that relocation would be expensive due to him owning a home. For another participant, the challenges of recreating her support system of friends would be too difficult. Anna, White female aged 47 with a bachelor's degree and 7 years of experience, stated

> I can't think of anything, because I wouldn't have anything that would take me out of the area. I can't think of anything else besides my university that would take me away (Anna, personal communication, October 3, 2014).

These responses suggested the participants were embedded highly in their communities. This high level of embeddedness resulted in the participant being unlikely to leave their communities and possibly their universities.

161

Sacrifice-to-community concentrated on the employees' perceptions on costs associated with leaving their communities, as in the case of relocation (Mitchell et al., 2001). These perceptions considered what the participants would give up if they left their communities. Their decision to leave would be predicated on the benefits of leaving outweighing the benefits of staying.

For the majority of the participants (41%), the benefits of finding better communities and employment opportunities would outweigh the benefits of staying in their communities. This suggested that these participants were less embedded in their communities and more likely to leave their community and potentially their university. However, 35% of the participants found the benefits of staying outweighed any advantages afforded them by leaving, which suggested that these participants were more embedded and more likely to stay in their community and with their university.

The willingness or unwillingness of the participants to leave their communities may or may not influence their intentions to stay with their university. The participants could move to another community and remain with their university. Conversely, the participants could leave their university and remain in their communities. Allen (2006) noted two reasons in which their decisions would lead employees to leave their employer.

The first reason was when geographic relocation was imminent (Allen, 2006). In this case, the employee was relocating away from their community and employer. These instances could arise with the employees' spouses being relocated or employees needing to move closer to family as mentioned by the participants. Considering that, 12 of the 14 married participants had spouses, who were employed, leaving their communities and employer was probable.

The other reason Allen (2006) noted was their sphere of connections in community could lead to the awareness of more employment opportunities and "perceptions of ease of finding a new job" (Allen, 2006, p. 245). The increased awareness and perceptions of job alternatives could affect the participants' intentions to stay (Mitchell et al., 2001). March and Simon (1958) in their seminal research on traditional turnover asserted that employees were more likely to quit when they perceived greater job alternatives.

Choices. When asked whether their community or university would be more difficult to leave, three themes emerged. The themes related to their choices: university, community, and both. These themes related to sacrifice-to-organization and sacrifice-to-community.

Sacrifice-to-community. For sacrifice-to-community, over half of the interviewed participants (9) stated that it would be more difficult to leave their communities as opposed to their universities. The participants mentioned that their communities were their home life and were difficult to replace. One participant felt it would be hard to make new friends and establish mutual trust. Two participants indicated they were more willing to leave their university for better employment opportunities than leave their community. Dexter, a White male aged 36 with a bachelor's degree and nearly ten years employment, stated,

> I think that would be harder because it would put some strain on them, but it would be a huge sacrifice for them to leave their friends and family and their established relationships in this community. I think that would be harder in the long run, for me personally it wouldn't matter, it would certainly affect them and that would in turn affect me. They would have no problem at all with me leaving the university if there was another position in the community that I could go to (Dexter, personal communication, October 10, 2014).

Their responses suggested that the participants possessed higher levels of community embeddedness as compared to their organizational embeddedness. For

these participants, the perceived costs of leaving their communities would be greater than the perceived costs of leaving their universities.

This finding was consistent with a study by Young et al. (2013). In their study, the researchers examined job embeddedness on the retention of governmental extension agents. The results showed that the extension agents felt that the opportunities foregone in leaving their communities was greater than the ones forgone in leaving their government agency.

Sacrifice-to-organization. For sacrifice-to-organization, 29% of the participants felt that it would be more difficult to leave their universities. The most cited reason was their relationships with their coworkers. The participants indicated their coworkers were like family or were important to them. Leaving their coworkers would be difficult for them. Another reason the participants felt leaving would be more difficult was their longevity with their university. The participant indicated that they had invested a substantial amount of time in working for their university. This investment of time was too great from which to walk away. Sam, a 34 year old White male with a bachelor's degree and 9 years of employment at his university, stated,

> For the longest time, they were tied together for me, so they were 'part and parcel'. Now, I've slowly began releasing my emotional attachments from the university to make it easier to divorce myself from this place. I think at this point, it would be much harder to leave my community than it would be to leave my university (Sam, personal communication, October 9, 2014).

These responses suggested high organizational embeddedness for these participants. Additionally, these responses reflected their perceived costs of breaking ties with their universities. In their cases, their coworker relationships and longevity with their university outweighed the benefits of leaving for alternative employment. Mitchell et al. (2001) asserted that the more the

individual had to give up when leaving the harder it would be for the individual to leave their employer.

Interestingly, three participants could not choose between their university and community. The participants provided reasons for their inability to choose. For university, two participants mentioned difficulty in leaving their coworkers and clients. One participant indicated that she was attached more her university and would prefer to live in a community that shared her values. For community, one participant mentioned difficulty in leaving his neighborhood. Another participant indicated she would be willing to leave her community to work at another university, preferably in the CSU system. Lastly, one participant indicated that she had lived in their community for several decades, she knew everyone in her community, and they knew her. Gretchen, aged 50 non-White female with some college and 25 years of professional experience, stated,

> They would both be difficult. I mean, my community, I've been here thirty-seven years. I've been involved with my community. I can't go anywhere without someone knowing me or me knowing them. I feel the same way about the university. I've been there seventeen years and I know everybody practically. I couldn't choose; I couldn't (Gretchen, personal communication, October 6, 2014).

These responses suggested that the participants were ambivalent in their attachments to their community and university. Additionally, these responses suggested that the perceived costs of leaving their communities and universities were equal.

Research Questions 3: Differences in Non-IT and
IT Professionals

The third research question inquired as to the extent job embeddedness, its six dimensions, and intentions to stay varied between IT professionals and non-IT professionals in public higher education. Although the groups did not differ

significantly in their overall job embeddedness and intentions-to-stay, the analysis revealed that significant differences existed between their on- and off-the job embeddedness dimensions.

Fit-to-organization. For on-the job embeddedness dimensions, non-IT professionals differed significantly from IT professionals on their fit-to-organization. Fit-to-organization looked at the extent to which the employee perceived their organization and job met their expectations in terms of their personal goals, values, and beliefs. This result suggested that the non-IT professionals felt their organizations were more compatible with their personal values, goals, and aspirations. Conversely, IT professionals felt their organizations and jobs were not compatible with their personal requirements.

The nature of the work performed by IT professionals differs from other professions. Individuals in this occupational group work long hours, late nights, meet after-hours, and on-call duty (Armstrong et al., 2007). They work in dynamic environments that require constant training activities (Fu, 2010) to update their skills and knowledge (Ahuja, 2002; Calisir et al., 2011; Chang et al., 2011). Failure to keep their skills current results in professional obsolescence (Agarwal & Ferratt, 2002), which can impede their career advancement (Fu, 2010). The activities performed by these individuals require a continual state of crisis and conflicting deadlines, that require rushing to meet expectations (Armstrong et al., 2007). Additionally, the project orientation of their work is coupled with fast technology changes, which require IT professions to continually update the skills (Armstrong et al., 2007).

For IT professionals, achieving a balance between the needs of the organization and their personal needs for professional skill currency can lead to incongruences. This disequilibrium can influence their comfort and compatibility

with their organization, as well as, their jobs. The potential of sustained incongruence could lead to a greater likelihood for leaving their organization.

This finding from Van Dyk et al.'s (2013) study was consistent with other research on how workers in dynamic fields with constant change need to continually update their technical skills (Fu, 2010). Additionally, this finding was consistent with other research on the need for highly skilled employees to avoid professional obsolescence (Zhang et al., 2012).

Van Dyk et al. (2013) sought to examine the role of specific retention factors on the embeddedness of medical and IT employees. The study involved 206 participants, who were identified as possessing scarce skills. Their study results suggested that highly embedded employees were more likely to stay, due to their satisfaction with their opportunities to grow and develop new skills. This finding suggested that embedded medical and IT professionals favored opportunities for training and development over other retention factors.

Zhang et al. (2012) found that fit-to-organization related significantly to perceived obsolescence. The researchers conducted a study to extend the job embeddedness theory to include perceived skill obsolescence, to test the relationships between perceived skill obsolescence and turnover intention, and to explore the predictive validity of the expanded model of job embeddedness. The study involved 1,777 IT professionals working for the Veterans Administration.

In regards to fit-to-organization, the researchers asserted that the currency of the IT professionals' skills influenced their perception of their compatibility with their organization. Based on this finding, Zhang et al. (2012) posited that IT professionals fit-to-organization depended on the technical orientation of their jobs and the skills possessed by the IT professionals. As such, the low embeddedness would lead to turnover due to decreased costs for leaving.

Links-to-community. For off-the job embeddedness dimensions, non-IT professionals differed significantly from IT professionals on their links-to-community. Links-to-community considered the ease in which employees could sever ties with their attachments and connections to their communities. This result suggested that non-IT professionals perceived greater costs associated with leaving their communities as compared to IT professionals. In contrast, IT professionals felt they could sever ties with their communities more easily than non-IT professionals could.

This finding is congruent with prior research on highly skilled workers. Holtom and O'Neill (2004) found that nurses differed from other healthcare workers on the links-to-community dimension. In their study, the researchers investigated the job embeddedness of employees working in healthcare using a longitudinal research design. The study involved 208 employees employed by a community-based hospital located in the north-west region of the United States. The researchers postulated that the factors influencing retention would not differ between nurses and other healthcare workers. The findings supported this hypothesis only partially. For nurses, the links-to-community was more prominent as compared to other healthcare workers.

Other job embeddedness research suggested that employees that are in high demand have more employment opportunities. Swider et al. (2011) found that the relationship between perceived job alternatives and turnover was stronger among employees with greater availability of job alternatives. This finding suggested that employees with greater availability of job opportunities amplified the likelihood that the employees would quit voluntarily (Swider et al., 2011). This study involved 895 staff employees working for a university in southwestern United States.

Summary of Discussion

The first research question examined the extent to which the participants' job embeddedness influenced their intentions to stay. The analysis revealed that the strongest predictors of their intentions to stay were the job embeddedness dimensions: sacrifice-to-organization and fit-to-organization. To a lesser extent, their intentions to stay were predicted by their job embeddedness dimensions: sacrifice-to-community and links-to-community. Lastly, the links-to-organization and fit-to-community were not predictors of the participants' intentions to stay.

These findings suggested that the better organizational and job fit the more likely these participants would stay. Additionally, greater perceptions of the costs of quitting the more likely the participants would stay. The predictive ability of sacrifice-to-organization (Van Dyk et al., 2013; Young et al., 2013) and fit-to-organization (Ramesh & Gelfand, 2010; Van Dyk et al., 2013) was consistent with prior job embeddedness research.

The second research question explored the participants' perceptions of their job embeddedness on their intentions to stay. The researcher used interviews to collect this qualitative data. The interview participants responded to questions regarding their reasons for staying and leaving their communities and universities. Additionally, the researcher asked about whether their community or university would be more difficult to leave. The emerging themes related to all six of the job embeddedness dimensions.

For the reasons why the participants remained at their universities, the major themes related to the fit-to-organization, links-to-organization, and sacrifice-to-organization. The fit-to-organization themes included their feelings on their organizational fit and their perceptions toward their job fit. Their links-to-organization theme dealt with their attachment to and connections with their

coworker. Lastly, their sacrifice-to-organization themes related to the benefits they would forgo, if they left their university.

Their responses suggested high level of embeddedness for fit-to-organization, links-to-organization, and sacrifice-to-organization. This high on-the job embeddedness suggested that the participants were more likely to continue working for their universities. These findings corroborated the quantitative findings for the predictive abilities of fit-to-organization and sacrifice-to-organization. Furthermore, the qualitative data helped to explain the specific reasons for the predictive qualities of fit-to-organization and sacrifice-to-organization.

For the reasons why the participants might leave their universities, the major themes related to fit-to-organization and sacrifice-to-organization. The major fit-to-organization theme was a better university culture that fostered appreciation, value, administrator support, and inclusivity. The sacrifice-to-organization themes included job-related reasons, better compensation, and relocation. The participants indicated they might leave if given the opportunity for professional development, growth, better compensation, and relocation due to family reasons.

Their responses suggested low levels of embeddedness for fit-to-organization and sacrifice-to-organization. These responses are consistent with the quantitative findings on the predictive abilities of fit-to-organization and sacrifice-to-organization. In this case, low embeddedness for these dimensions increased the likelihood of these participants leaving. Additionally, the responses provided explanations as to the contextual factors involved with their decision to stay or quit.

These findings were consistent with other research. Van Dyk et al. (2013) and Holmes et al. confirmed the role of training and development on job embeddedness and retention. Young et al. (2013) found compensation be a factor in the on-the job embeddedness of extension agents. Relocation was found to be a factor in embeddedness and retention in research by Ramesh and Gelfand (2010) and Smith et al. (2011).

For the reasons why the participants remained in their communities, the major themes related to the fit-to-community and links-to-community. The fit-to-community theme was the favorability of the community. The links-to-community themes included family connections and longevity in the community. Their responses suggested high level of embeddedness for their fit-to-community and links-to-community. Their high embeddedness suggested that participants were more likely to remain in their community and possibly with their universities.

The quantitative analysis showed that the links-to-community was to a lesser extent a predictor of intentions to stay. The participants' responses helped to explain how their attachments to their communities affected their intentions to stay. The fit-to-community was not a predictor of intentions to stay. Given the geographic dispersion of the communities involved the reasons why the participants stayed and would leave help to explain its non-predictive abilities.

For the reasons why the participants would leave their communities, the themes related to fit-to-community and sacrifice-to-community. Seeking better communities related to the fit-to-community. The sacrifice-to-community themes dealt with relocating closer to family, finding better employment opportunities, and not leaving. The participants' responses suggested low levels of

embeddedness for fit-to-community and sacrifice-to-community, which could affect their intentions to remain in the communities and their universities.

In the qualitative analysis, sacrifice-to-community was to a lesser extent, a predictor of intentions to stay. The participants' responses and lived experiences helped to explain the factors considered in deciding to leave their communities and potentially their employers.

For the participants' choices, their responses related to sacrifice-to-organization and sacrifice-to-community. The majority of the participants found leaving their communities more difficult. This response suggested that the perceived cost of leaving their community was greater than leaving their universities. This finding conflicts somewhat with the qualitative finding that sacrifice-to-community was a lesser predictor of intentions to stay.

Other participants were expressed stronger embeddedness toward their universities. Their responses related to sacrifice-to-organization. For these participants, the costs associated with leaving their university were greater than leaving their communities. This finding was consistent with the quantitative analysis, which showed that sacrifice-to-organization was a stronger predictor of intentions to stay.

Less than 20% of the participants were unable to choose or chose both would be difficult to leave. This suggested ambivalence in their embeddedness and likelihood in staying.

The third research question explored the extent to which non-IT professionals differed from IT professionals on job embeddedness and intentions to stay. The finding suggested that the groups differed significantly on their fit-to-organization and links-to-community. The results suggested that the non-IT

professionals felt a better fit with their organization and perceived greater costs associated with leaving their communities as compared to IT professionals.

For fit-to-organization, these differences may be attributable to IT professionals' need for achievement and for avoiding professional obsolescence. The willingness of IT professionals to relocate for better job fits and growth may explain their lower sacrifice-to-community embeddedness.

Recommendations

Although study addressed the factors that contributed to the retention of employees in public higher education, specific elements could enhance and extend this research. These elements related to the survey instrument composition, sampling methods, and composite scoring.

Survey Composition

The first element dealt with the modified survey instrument. The survey instrument was a modified version of the instrument used in Mitchel et al. (2001) study. The survey items included fill-in-the blank, dichotomous selections, and Likert-scaled items. The use of dichotomous selections for the links-to-community affected the ability to compute composites for this dimension. Future use of this instrument should consider rewording these items, as Likert scaled items. In doing so, the results may have yielded different results.

The turnover intentions were measured using two-items from the original survey by Mitchell et al. (2001). These two items may have measured insufficiently the turnover intentions of the participants. Future use of this instrument should consider including the third-item from the original survey or using a modified version of the Turnover Intention Scale (TIS-6) designed by Bothma and Roodt (2013).

Additionally, notably missing from the survey instrument were items related to job search activity. Prior research found that job search activity was an antecedent of turnover intentions. Although antecedent behaviors were not the focus of this study, the inclusion of this measure might explain other factors involved in the participants' intentions to stay deliberations.

Sampling Method

The second element involved the representativeness of the sample. The sample may not represent the target population for a number of reasons. The response rate for the survey was 10.7%. The low response rate may be attributable to the distribution method, the use of a single distribution source, and the timing of the survey distribution.

The primary method for distributing the survey was email. Considering the diversity of the CSU system, it is conceivable that some employees did not have email addresses or access to email. In this case, these employees did not have an opportunity to participate in this research.

In regards to the single distribution source, the researcher relied on the CSUEU union for the survey distribution. The CSUEU represented the majority of the staff employees (12,500) working for the CSU system. However, other unions, such as the American Physicians and Dentists (UAPD), Academic Professionals of California (APC), State Employees Trades Council (SETC), and Statewide University Police Association (SUPA), represented the other staff employees, approximately 7,000 employees. The researcher did attempt to make contact with these unions. However, the researcher did not receive any responses to the initial inquiries. Time limitations prevented the researcher from persisting in the contact and inclusion of these unions in this study. As such, the majority of the sample (96.4%) consisted of employees represented by the CSUEU.

In terms of the survey distribution timing, the survey was distributed during the summer months. Although the survey was available for two months to allow for vacations, some employees were unable to participate. In addition to the full-time, 12-month employees, the CSU system employs individuals that work only 10 and 11 months out of the year. The data collection for the survey occurred during the time that these individuals may not have been working.

Composite Scoring

The third element involved composite scoring. The statistical analyses used in this study relied upon composite scores. The researcher computed composite scores for the independent variables, overall job embeddedness and its six dimensions, as well as the dependent variable, intentions to stay. The computations involved using the means of the scaled items. In some cases, such as the overall job embeddedness, the composite score consisted of using the mean of means of the scaled items. This additive process of combining scales could "ignore the unique importance that individuals place on different facets when forming a summary perception" (Crossley et al., 2007, p. 1032).

In summary, this study addressed the factors that contributed to the retention of employees in public higher education. However, survey instrument modifications, sampling methods, and global job embeddedness measures could enhance and extend this research.

Implications for Practice

Devising retention policies is a crucial task considering the twenty-first century labor market (Ortlieb & Sieben, 2012). Effective retention policies seek to preserve key resources, reduce voluntary turnover, and lower costs associated with turnover. An important aspect of informing retention policies is to understand the

factors that contribute to employees choosing to remain with their employers (Brock & Buckley, 2013). This present study showed that on- and off-the job embeddedness affected the retention of employees.

On-the Job Embeddedness

On-the job embeddedness considers retention factors from the organizational perspective. It encompasses the job embeddedness dimensions: the fit-to-organization, links-to-organization, and sacrifice-to-organization. This study showed that on-the job embeddedness influenced the retention of staff employees in public higher education.

In devising effective retention policies, consideration must be given to the needs of the organization, as well as its employees. This study showed that organizational and job fit were strong predictors of employee retention. Overall, the study results showed the participants felt they fit well with their organization and their jobs. However, administrators will need to continue to ensure the organizational and job fit for these employees. Efforts in this regard should include strengthening their university cultures to foster appreciation and respect for their employees, equitable treatment of faculty and staff (Holmes et al., 2013; Swider et al., 2011), and inclusive practices for new employees (Allen, 2006).

Another aspect of effective retention policies deals with increasing the perceived costs of leaving the university. This study revealed that sacrifice-to-organization was the strongest predictor of retention. Compensation and opportunities for training and growth were among the common themes for this job embeddedness dimension. Providing competitive salaries is challenging for public institutions of higher education. Unlike their private counterparts, public universities are constrained in their efforts to offer competitive salaries by their annual fiscal year budget cycles and shrinking fiscal budgets. Past quality of work

life advantages fail to bridge the widening gap in salary offered by private institutions (Dewitt, 2002). Moving forward, compensation systems must reward employees for their knowledge and experience, as well as, incent the employees to stay (Young et al., 2013). The qualitative findings from this study suggested that compensation systems, such as In-range Progression might be ineffective. Employees may leave to avoid the difficulty with requesting salary increases (Brock & Buckley, 2013).

Further, training and growth opportunities are important aspects for retaining employees. Like compensation, public universities lack the financial resources to provide training and growth opportunities on par with their private counterparts. The qualitative findings revealed that the lack of training and growth opportunities would lead some employees to seek employment elsewhere. Low cost options for providing training and growth are available. Public universities could consider implementing communities of practice and professional learning communities, which will facilitate knowledge acquisition and preservation.

Although links-to-organization was not a predictor of employee retention in this study, literature on attachment and affective organizational commitment suggested that links-to-organization could influence retention (Mitchell et al., 2001). In this regard, public universities will need to find ways in which to increase the attachments employees have to their organizations. Implementing formal and informal mentoring and coaching programs can facilitate and strengthen the attachments employees have toward their universities (Reitz & Anderson, 2011). Further, the programs can improve the organizational culture and inclusion practices by promoting shared values.

Off-the Job Embeddedness

Off-the job embeddedness considers factors from the external environment that could influence on retention. It encompasses the job embeddedness dimensions: the fit-to-community, links-to-community, and sacrifice-to-community. This present study showed that off-the job embeddedness influenced the retention of staff employees in public higher education.

Devising effective retention policies that strengthen off-the embeddedness for public employees can be challenging. Public universities are limited in the options available to them. As such, public universities will need to create strategies that are innovative as to avoid public criticism and to promote retention.

Increasing the connections that employees have to their communities can facilitate employee retention. This present study showed that links-to-community was a predictor of employee retention to a lesser extent. The qualitative findings helped to explain how their attachments to their communities affected their intentions to stay. As such, retention strategies aimed at increasing links-to-community would need to focus on providing opportunities for the employees to connect more with their communities. These strategies could consider offering release time to staff employees to volunteer their time to charitable organizations that promote teaching and learning or educational outreach efforts.

Employees' perceptions on the costs associated with leaving their communities can influence their retention as evidenced by this present study. This study showed that sacrifice-to-community was a predictor of employee retention to a lesser extent. The qualitative findings corroborated and explained the factors considered in deciding to leave their communities and potentially their employers. To this end, retention strategies aimed at increasing the benefits of their communities could make it to more difficult for them to leave. An important

feature of retention policies is communication. Ratna and Chawla (2012) found that communication was an important factor in employees staying with their employer. As such, making employees aware of community-based discounts or mortgages for public employees can help to build long-term commitments between the employees and their communities.

Although fit-to-community was not a predictor of intentions to stay, it remains an important dimension of job embeddedness and employee retention. One consideration for increasing the compatibility between employees and their communities is adopt a retention strategy of promoting and hiring from within (Reitz & Anderson, 2011). An advantage of promoting and hiring from within is that the employees are more likely to be familiar and comfortable with their communities. In some cases, these employees are seeking to stay within their communities. By promoting and hiring from within, the universities create growth opportunities and increase the likelihood of employee retention due to their fit with their community. Additionally, this practice has the potential to lower relocations costs and foster a culture of appreciation and respect for staff employees.

Retention of IT Professionals

The last aspect of the implications for practice involves the retention of IT professionals. Literature on IT professionals suggested that these employees have a propensity to leave (Korunka et al., 2008). Despite offering competitive salaries and opportunities to work with emerging and current technologies, many organizations continued to experience IT turnover that was higher than expected and desired (Agarwal & Ferratt, 2002). Agarwal and Ferratt (2002) argued that assertive human resource and management practices are required to overcome this outflow of intellectual capital.

This study showed that IT professionals differed from employees in other occupation groups. More specifically, the IT professionals differed on their fit-to-organization and links-to-community. For fit-to-organization, the IT professionals felt less compatibility and comfort with their organizational and job fit. Retention strategies aimed at improving the organizational and job fit for IT professionals should include increasing job autonomy, such as allowing these employees to make decisions about their work (Coombs, 2009). Other strategies include assisting IT professionals in understanding how the value of their work contributes to the overall university mission in promoting teaching and learning (Coombs, 2009).

For links-to-community, the IT professionals felt less attached to their communities. The willingness for these employees to relocate in the pursuit of professional and growth opportunities may explain this phenomenon. To increase the IT professionals' connections to their communities, retention strategies should focus assisting these employees to build connections within their communities. These efforts could include having the employees speak at schools regarding their profession. Other efforts could involve providing opportunities for the IT professionals to engage with community partners and external stakeholders and (Coombs, 2009).

Implications for Future Research

An advantage of conducting research is the pursuit of truth and the explication of observed phenomena. While research answers the pursued inquiries, it, at the same time, generates new lines of inquiry. As is the case with this present study, questions arose as to the effects of the current economic conditions, the use of data from a public university in one state, and the influence

of specific retention policies on job embeddedness. Future research is necessary to address these additional lines of inquiry.

Future research should focus on the effects of economic conditions on job embeddedness and retention. Employees are more likely to remain with employers during economic downturns (Hathaway, 2013). With the economic recovery, financial investments are stabilizing and more Baby Boomers are retiring. A longitudinal study exploring job embeddedness and retention over time would help to explicate the effects of these economic conditions.

Prior research suggested the job embeddedness was influenced by contextual factors. The data from a public university system in one state may not capture the full import of these contextual factors. Future research should consider data from public universities from more than one state.

Another area for future research should consider is specific recruitment and retention strategies for highly skilled workers, such as IT professionals. With fewer qualified workers and increased competition for this limited pool of applicants, the need to understand from an empirical perspective the factors that attract and retain highly skilled workers is increasing in importance. To this end, future research should explore specific practices for the attraction and retention of these workers.

Limitations

This present study provides empirical evidence of the effects of job embeddedness on intentions to stay among staff employees in public higher education. Like any study, this study has inherent limitations. The limitations regarding the design are noted in Chapter 3. However, the limitations that emerged during the study are note here.

One potential limitation is the samples differed from the demographics of the CSU system. In the quantitative phase, women and Whites were over represented in the sample. In the qualitative phase, the sample was over representative of women and under representative of Whites. These over and under representations may limit the generalizability of these findings.

Conclusion

In conclusion, this study sought to explain the job embeddedness factors that contributed to the retention of employees in public higher education, with an emphasis on IT professionals. This study contributed to the research on job embeddedness of public employees, job embeddedness in public higher education, retention of public employees, and retention of IT professionals.

Job Embeddedness in Public Higher Education

Most of the research on job embeddedness focused on the private sector. These studies involved participants working in different contexts. These studies explored job embeddedness in retail (Mitchell et al., 2001), hospitals (Holtom & O'Neill, 2004; Mitchell et al., 2001), financial institutions (Allen, 2006; Lee et al., 2004), assisted living firms (Crossley et al., 2007), and various other industries (Halbesleben & Wheeler, 2008).   For the public sector, the majority of the job embeddedness research concentrated on government agencies (Dawley & Andrews, 2012; Holmes et al., 2013; Young et al., 2013) and the military (Smith et al., 2011).

For public higher education, this study expanded the job embeddedness research on staff employees working in public higher education. Up to this point, the researcher was aware of only one study that explored the job embeddedness among staff employees at a public university (Swider et al., 2011). This study

confirmed the predictive validity of the job embeddedness construct on the retention of staff employees in public higher education. Additionally, this study provided qualitative findings as to the reasons staff employees continue working for their public universities.

This contribution is important due to the influence of organizational type on job embeddedness. Jiang et al. (2012) noted that job embeddedness varied based on organizational type. Their meta-analysis revealed that job embeddedness explained more of the variance in intentions to stay in public institutions as compared to public institutions. This study showed that job embeddedness explained 32% of the variance in the intentions to stay for staff employees in public higher education.

Literature on IT Professionals

A paucity of research existed on job embeddedness and turnover of information technology professionals in any context (Joseph et al., 2007; Lo, 2013), not to mention in the public higher education system. IT professionals were the foci of job embeddedness research in private and public settings. In private settings, job embeddedness research involved IT professionals employed at call centers in the US and India (Ramesh & Gelfand, 2010) and at organizations that provided medical and IT services in the United States (Van Dyk et al., 2013). In public settings, job embeddedness research concentrated on IT professionals working for government agencies, such as the Veterans Administration (Zhang et al., 2012).

Joseph et al. (2007) advocated that future research should explore the fit, links, and sacrifice constructs associated with the job embeddedness theory to explain turnover among information technology professionals. This present study contributes to the job embeddedness research by identifying specific dimensions

that influence the job embeddedness of IT professionals. It expands the job embeddedness research to IT professionals in public higher education. Lastly, the present study identifies factors that distinguish IT professionals from employees in other professions.

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APPENDIX A: CONSENT FORM

Dear CSU employee:

You are invited to participate in a research study regarding the retention of employees in the CSU system. The purpose of this study is to determine the reasons employees choose to   stay with or leave their organizations. Additionally, this study aims to determine whether the intentions to stay or leave differ between IT professionals and non-IT professionals Your participation in this study has the potential to inform the research on effective management practices and strategies for retaining employees in public higher education.

Duration of Participation

This study will take place from April 2014 until December 2014.

Risks to the Individual

No study is without risk. As such, the risks of this study are no more than you would encounter in everyday life.

Confidentiality

The researcher will exert every effort to maintain your confidentiality. The researcher will remove any identifiable information from the data. Your responses will be reported in aggregate form only. Only the researcher will have access to your name and actual responses; the CSU nor anyone else outside of the researcher will have access to your names or actual responses. Your names will only be used to identify you for an interview follow-up. All responses from your surveys and interviews will be held in a secure location.

Voluntary Nature of Participation

Participation in this research study is purely voluntary. You do not have to participate in this research project. If you agree to participate, please know that you can withdraw your participation at any time without penalty.

Human Subject Statement

The methodology employed for this study will adhere to the human subject regulations as outlined by the National Institute of Health (NIH), Institutional Review Board (IRB), and approved practices for human subjects research. The study may entail surveying and interviewing you, with your consent.

If you have any questions about this research study, you can contact Tammara Sherman, at tksherman@mail.fresnostate.edu.

Agreement to participate

I am certifying my willingness to participate in this research study. I have had the opportunity to read this consent form, ask questions about the research project and am prepared to participate in this project.

☐ Yes, I consent to participate

☐ No, I decline to participate

APPENDIX B: SURVEY INSTRUMENT

Demographic Characteristics

Select the values that best describe your answer

1. Gender	Male Female	
2. Age	_____	
3. Ethnicity	White Black Hispanic Asian Other	
4. How long have you worked for your university?	____Years _____ Months	
5. How long have you been in your current position?	____Years _____ Months	
6. How many years of experience do you have in your profession?	____Years _____ Months	
7. What CSU campus are you employed at?	(Contains drop-down selection of all 23 campuses)	
8. What is your classification	(Contains drop-down selection of all staff classification codes)	
9. If you are staff, do you work in the IT department or as an IT professional?	Yes or No	

Job Embeddedness

Scale: 1 = Strongly agree, 2 = Agree 3 = Neither Agree or Disagree, 4 = Disagree, 5 = Strongly Disagree

10. I really like the area where I live	1	2	3	4	5
11. The weather where I live is suitable to me	1	2	3	4	5

12. This community is a good match for me	1	2	3	4	5
13. I think of the community where I live as home	1	2	3	4	5
14. The area where I live offers the leisure activities that I like	1	2	3	4	5
15. I like the members of my work group	1	2	3	4	5
16. My coworkers are similar to me	1	2	3	4	5
17. My job utilizes my skills and talents well	1	2	3	4	5
18. I feel like I am a good match for this university	1	2	3	4	5
19. I fit with the university's culture	1	2	3	4	5
20. I like the authority and responsibility I have at this company	1	2	3	4	5
21. My values are compatible with the university's values	1	2	3	4	5
22. I can reach my professional goals working for this university	1	2	3	4	5
23. I feel good about my professional growth and development	1	2	3	4	5

Select Yes or No to the following questions.

24. Are you currently married?	Yes	No
25. If you are married, does your spouse work outside of the home?	Yes	No
26. Do you own the home you live in?	Yes	No
27. My family roots are in this community.	Yes	No

Select the values that best describe your answer

	0-5	6-10	11-15	16-20	20 or more
28. How many family members live nearby?	0-5	6-10	11-15	16-20	20 or more
29. How many of your close friends live nearby?	0-5	6-10	11-15	16-20	20 or more
30. How long have you worked in your field or industry?	0-5	6-10	11-15	16-20	20 or more
31. How many coworkers do you interact with on a weekly basis?	0-5	6-10	11-15	16-20	20 or more
32. How many coworkers are highly dependent on you at your university?	0-5	6-10	11-15	16-20	20 or more
33. How many work teams, permanent groups, are you on?	0-5	6-10	11-15	16-20	20 or more
34. How many work committees, temporary groups, are you on?	0-5	6-10	11-15	16-20	20 or more

Scale: 1 = Strongly agree, 2 = Agree 3 = Neither Agree or Disagree, 4 = Disagree, 5 = Strongly Disagree

35. Leaving this community would be very hard	1	2	3	4	5
36. People respect me a lot in my community	1	2	3	4	5
37. My neighborhood is safe	1	2	3	4	5
38. The perks on this job are outstanding	1	2	3	4	5
39. I feel that people at work respect me a great deal	1	2	3	4	5

40. I would sacrifice a lot if I left this job	1	2	3	4	5
41. My promotional opportunities are excellent here	1	2	3	4	5
42. I am well compensated for my level of performance	1	2	3	4	5
43. I have a lot of freedom on this job to decide how to pursue my goals	1	2	3	4	5
44. The benefits are good on this job	1	2	3	4	5
45. The health-care benefits provided by this university are excellent	1	2	3	4	5
46. The retirement benefits provided by this university are excellent	1	2	3	4	5
47. The prospects for continuing employment with this university are excellent	1	2	3	4	5

Job Satisfaction

Scale: 1 = Strongly agree, 2 = Agree 3 = Neither Agree or Disagree, 4 = Disagree, 5 = Strongly Disagree

48. Overall, I am satisfied with my job.	1	2	3	4	5
49. In general, I like working here.	1	2	3	4	5
50. In general, I don't like my job (reverse scored)	1	2	3	4	5

Affective Organizational Commitment

Scale: 1 = Strongly agree, 2 = Agree 3 = Neither Agree or Disagree, 4 = Disagree,

5 = Strongly Disagree

51. I would be very happy to spend the rest of my career with this organization	1	2	3	4	5
52. I enjoy discussing my organization with people outside of it	1	2	3	4	5
53. I really feel as if this organization's problems are my own	1	2	3	4	5
54. I think that I could easily become as attached to another organization as I am to this one	1	2	3	4	5
55. I do not feel like 'part of the family' at my organization	1	2	3	4	5
56. I do not feel 'emotionally connected' to this organization	1	2	3	4	5
57. This organization has a great deal of personal meaning for me	1	2	3	4	5
58. I do not feel a strong sense of belonging to my organization	1	2	3	4	5

Turnover Intentions

Scale: 1 = Strongly agree, 2 = Agree 3 = Neither Agree or Disagree, 4 = Disagree, 5 = Strongly Disagree

59. I intend to leave my organization within the next year.	1	2	3	4	5
60. I feel strongly about leaving my organization within the next year.	1	2	3	4	5

APPENDIX C: INSTRUMENT PERMISSION EMAIL

Tammara

From:	Terry Mitchell <trm@uw.edu>
Sent:	Wednesday, March 19, 2014 3:46 PM
To:	'Tammara Sherman'; trm@u.washington.edu; brooks.hamilton@marquette.edu; orcas@u.washington.edu; chrissab@u.washington.edu; merez@ie.technion.ac.il
Cc:	sharonb@csufresno.edu
Subject:	RE: Permission to use Job Embeddedness Model

Fine with me Tammara. Thanks for asking

Terry mitchell

Terence Mitchell
Foster School of Business
University of Washington

From: Tammara Sherman [mailto:tksherman@mail.fresnostate.edu]
Sent: Wednesday, March 19, 2014 2:35 PM
To: trm@u.washington.edu; brooks.hamilton@marquette.edu; orcas@u.washington.edu; chrissab@u.washington.edu; merez@ie.technion.ac.il
Cc: sharonb@csufresno.edu
Subject: Permission to use Job Embeddedness Model

Drs. Mitchell, Brooks, Lee, Sablynski, and Erez:

My name is Tammara Sherman. I am pursuing my Ed.D. at Fresno State University in Fresno, California. I am writing my dissertation on retention of employees in the California State University system, with a particular emphasis on IT professionals.

I have chosen Job Embeddedness as my theoretical framework. As, such I would greatly appreciate your permission in using your survey instrument from your original study (Citation listed below).

Mitchell, T. R., Holtom, B. C., Lee, T. W., Sablynski, C. J., & Erez, M. (2001). Why people stay: Using job embeddedness to predict voluntary turnover. Academy of Management Journal, 44(6), 1102-1121.

Please permit me to use your instrument. I look forward to hearing from you soon.

Sincerely,

Tammara Sherman
Doctoral Student
Doctoral Program in Educational Leadership
Fresno State
661-331-7197
tksherman@mail.fresnostate.edu

"Tell me and I forget, teach me and I remember, involve me and I learn"
Benjamin Franklin

1

1

APPENDIX D: INTERVIEW PROTOCOL

1. Up to now, what work-related factors have led you to continue working for your organization?

2. Up to now, what factors outside of work have led you to remain working for your organization?

3. What work-related factors would cause you to leave your organization?

4. What factors outside of work would lead you to leave your organization?

5. Which would be more difficult, leaving your job or your community and why?

APPENDIX E: REVISED SURVEY INSTRUMENT

Job Embeddedness and Retention Survey

Drawing information

If you want to participate in the drawing please enter your name and email address. Please note that the drawing information, such as your name and email address, will be kept confidential and separately from the survey data.

By entering my name and email address, I am certifying my willingness to participate in the drawing for a $100 Amazon gift certificate. I understand that I may choose to withdraw from the study without withdrawing from the drawing.

If you prefer to not participate in the drawing, just click the Next button.

1. Please enter your name and contact information.

Name

Email Address

Job Embeddedness and Retention Survey

Welcome to the Study on Job Embeddedness and Retention among CSU Staff.

Consent Form

Dear CSU employee:

You are invited to participate in a research study regarding the retention of employees in the CSU system. The purpose of this study is to determine the reasons employees choose to stay with or leave their organizations. Additionally, this study aims to determine whether the intentions to stay or leave differ between IT professionals and non-IT professionals.

Your participation in this study has the potential to inform the research on effective management practices and strategies for retaining employees in public higher education. As an incentive to participate, you will have the opportunity to participate in a drawing for a $100 Amazon gift card.

Duration of Participation
This study will take place from June 2014 until December 2014.

Benefits to the Individual
The findings from this study have the potential to benefit you by adding to the research on job embeddedness, retention, and public university employees. Additionally, your contribution in this study has the potential to inform future management practices and retention policies.

Risks to the Individual
No study is without risk. As such, the risks of this study are no more than you would encounter in everyday life.

Confidentiality
The researcher will exert every effort to maintain your confidentiality. The researcher will remove any identifiable information from the data. Your responses will be reported in aggregate form only. Only the researcher will have access to your name and actual responses; the CSU nor anyone else outside of the researcher will have access to your names or actual responses. Your names will only be used to identify you for an interview follow-up. All responses from your surveys and interviews will be held in a secure location.

Voluntary Nature of Participation
Participation in this research study is purely voluntary. You do not have to participate in this research project. If you agree to participate, please know that you can withdraw your participation at any time without penalty.

Human Subject Statement
The methodology employed for this study will adhere to the human subject regulations as outlined by the National Institute of Health (NIH), Institutional Review Board (IRB), and approved practices for human subjects research. The study may entail surveying and interviewing you, with your consent.

If you have any questions about this research study, you can contact Tammara Sherman, at tksherman@mail.fresnostate.edu.

Agreement to participate
I am certifying my willingness to participate in this research study. I have had the opportunity to read this consent form, ask questions about the research project, and am prepared to participate in this project.

Additionally, I understand that my name will be entered in to a drawing for a $100 Amazon gift card, that the drawing will occur randomly at the end of the study, and that all participants will be notified of winners by December 31, 2014. I may choose to withdraw from the study without withdrawing from the drawing.

By making the selection to participate, I am consenting to participate in this study. I acknowledge that my participation is

Page 2

Job Embeddedness and Retention Survey

WHOLLY VOLUNTARY and I can exit the survey at any time without withdrawing from the drawing.

*2. I choose to:

[▼]

Job Embeddedness and Retention Survey

Role

*3. What CSU campus are you employed at?

[▼]

*4. What is your role at your unversity?

[▼]

Job Embeddedness and Retention Survey

Demographics

*5. What is your gender?

○ Female

○ Male

*6. What is your age?

[text box]

*7. What is your ethnicity?

○ White

○ Black

○ Hispanic

○ Asian

○ Other

Job Embeddedness and Retention Survey

Demographics - Part II

*8. What is the highest level of education that you attained?

[▼]

*9. What is the zip code of where you live?

[   ]

*10. What union bargaining unit are you represented by? (Please respond with the appropriate union, whether or not you are paying the full union fees)

[▼]

www.manaraa.com

Job Embeddedness and Retention Survey

Employment and Professional Experience

*11. How long have you worked for your university?

Years

Months

*12. How long have you worked in your current position?

Years

Months

*13. How many years of experience do you have in your profession?

Years

Months

*14. Do you work in the IT department or as an IT professional?

○ Yes

○ No

Job Embeddedness and Retention Survey

Fit to Community

*15. Please consider the following statements and indicate your level of agreement or disagreement with the statements.

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
I really like the area where I live	○	○	○	○	○
The weather where I live is suitable to me	○	○	○	○	○
This community is a good match for me	○	○	○	○	○
I think of the community where I live as home	○	○	○	○	○
The area where I live offers the leisure activities that I like	○	○	○	○	○

Job Embeddedness and Retention Survey

Fit to Organization

*16. Please consider the following statements and indicate your level of agreement or disagreement with the statements.

	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree
I like the members of my work group	○	○	○	○	○
My coworkers are similar to me	○	○	○	○	○
My job utilizes my skills and talents well	○	○	○	○	○
I feel like I am a good match for this university	○	○	○	○	○
I fit with the university's culture	○	○	○	○	○
I like the authority and responsibility I have at this organization	○	○	○	○	○
My values are compatible with the university's values	○	○	○	○	○
I can reach my professional goals working for this university	○	○	○	○	○
I feel good about my professional growth and development	○	○	○	○	○

Job Embeddedness and Retention Survey

Links to Community (1/2)

*17. Are you currently married or a registered domestic partner?

[▾]

Job Embeddedness and Retention Survey

Links to Community (1/2)

*18. Does your spouse or partner work outside of the home?

[▼]

Job Embeddedness and Retention Survey

Links to Community (2/2)

*19. Do you own the home you live in?

[▼]

*20. My family roots are in this community

[▼]

*21. Please select the values that best describe your answer.

	0-5	6-10	11-15	16-20	20 or more
How many family members live nearby?	○	○	○	○	○
How many of your close friends live nearby?	○	○	○	○	○

Job Embeddedness and Retention Survey

Links to Organization

*22. Please select the values that best describe your answer.

	0-5	6-10	11-15	16-20	20 or more
How many coworkers do you interact with on a weekly basis?	○	○	○	○	○
How many coworkers are highly dependent on you at your university?	○	○	○	○	○
How many work teams (permanent groups) are you on?	○	○	○	○	○
How many work committees (temporary groups) are you on?	○	○	○	○	○

Job Embeddedness and Retention Survey

Sacrifice to Community

*23. Please consider the following statements and indicate your level of agreement or disagreement with the statements.

	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	StronglyDisagree
Leaving this community would be very hard	○	○	○	○	○
People respect me a lot in my community	○	○	○	○	○
My neighborhood is safe	○	○	○	○	○

Job Embeddedness and Retention Survey

Sacrifice to Organization

*24. Please consider the following statements and indicate your level of agreement or disagreement with the statements.

	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree
The perks on this job are outstanding	○	○	○	○	○
I feel that people at work respect me a great deal	○	○	○	○	○
I would sacrifice a lot if I left this job	○	○	○	○	○
My promotional opportunities are excellent here	○	○	○	○	○
I am well compensated for my level of performance	○	○	○	○	○
I have a lot of freedom on this job to decide how to pursue my goals	○	○	○	○	○
The benefits are good on this job	○	○	○	○	○
The health-care benefits provided by the university are excellent	○	○	○	○	○
The retirement benefits provided by the university are excellent.	○	○	○	○	○
The prospects for continuing employment with the university are excellent	○	○	○	○	○

Job Embeddedness and Retention Survey

Job Satisfaction

*25. Please consider the following statements and indicate your level of agreement or disagreement.

	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree
Overall, I am satisfied with my job	○	○	○	○	○
In general, I like working here	○	○	○	○	○
In general, I do not like my job	○	○	○	○	○

Job Embeddedness and Retention Survey

Organizational Commitment (1/2)

*26. Please consider the following statements and indicate your level of agreement or disagreement.

	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree
I would be very happy to spend the rest of my career with this organization	○	○	○	○	○
I enjoy discussing my organization with people outside of it	○	○	○	○	○
I really feel as if this organization's problem are my own	○	○	○	○	○
I think that I could easily become as attached to another organization as I am to this one.	○	○	○	○	○
This organization has a great deal of personal meaning for me	○	○	○	○	○

Job Embeddedness and Retention Survey

Organizational Commitment (2/2)

*27. Please consider the following statements and indicate your level of agreement or disagreement.

	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree
I do not feel like 'part of the family' at my organization	○	○	○	○	○
I do not feel 'emotionally connected' to this organization	○	○	○	○	○
I do not feel a strong sense of belonging to my organization	○	○	○	○	○

Job Embeddedness and Retention Survey

Turnover Cognition

*28. Please consider the following statements and indicate your level of agreement or disagreement.

	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree
I intend to leave my organization within the next year	○	○	○	○	○
I feel strongly about leaving my organization within the next year	○	○	○	○	○

Job Embeddedness and Retention Survey

Consent to Proceed with Phase 2 of the Study

This study has two phases. In the second phase of the study, the researcher will conduct interviews with selected participants. If you would like to participate in the second phase of this study, please indicate your agreement to proceed and provide your contact information.

Your participation in the second phase of this study is voluntary. You will still have the option to exit the study at any time. Additionally, your contact information will not be included with the survey results. It will be used only to arrange a time for an interview. All interview data will be kept confidential and your identity will be concealed.

*29. I choose to:

[▼]

Job Embeddedness and Retention Survey

Contact Information

30. Please provide your contact information.

Name

Email Address

Phone Number

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