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Employee Turnover in the Long-Term Care Industry using Herzberg's Motivation-Hygiene Theory

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Abstract

Employee turnover costs long-term care facilities billions of dollars on an annual basis. The purpose of this correlational study was to examine the relationships between employee turnover intention of certified nursing assistants (CNAs) in the long-term care industry and employee compensation, engagement, job satisfaction, motivation, and work environment. The predictor variables were employee compensation, engagement, job satisfaction, motivation, and work environment. The criterion variable was employee turnover intention. The population of interest consisted of CNAs who were residents of Florida, over the age of 18 years, and employed in the long-term care industry. The theoretical framework that grounded this study was the motivational-hygiene theory. For this study, a sample of 157 participants completed an electronic survey. Multiple linear regression analyses predicted the dependent variables, $R^2 = .34$, $F(5, 151) = 15.22$, $p < .0001$. The multiple regression model with 4 of the 5 predictors accounted for significantly more variance in turnover intention than would be expected by chance. Correlation tests resulted in statistically significant inverse relationships between employee turnover intention and employee compensation, engagement, job satisfaction, and work environment. The negative correlation observed between motivation and turnover intention was not statistically significant. The findings in this study may contribute to positive social change by reducing turnover intention while improving the quality of care and reducing costs of care that affect the lives of the long-term care residents, concerned family members, and significant others.

Keywords: Employee Turnover, Job Satisfaction, Compensation, Engagement, Motivation, Work Environment and Long-Term Care.

Introduction

Direct care providers, such as certified nursing assistants (CNAs), are integral to the long-term care workforce, with over 600,000 CNAs providing the majority of daily care to almost 1.5 million long-term care facility residents in America (Khatutsky, Wiener, Anderson & Porell, 2012). One of the more impenetrable issues facing long-term care facilities is the high rate of turnover

of CNAs (Kayyali, 2014). Employees are one of the key assets of an organization and a main contributor to business success, providing a competitive edge in the long-term care industry (Squires et al., 2015). Healthcare professional turnover remains a major issue for leaders in the long-term care industry (Kayyali, 2014). Employee turnover is costly (Kim, 2012) and companies cannot afford to lose skilled professionals with significant knowledge (Dinger, Thatcher, Stepina, & Craig, 2012). Therefore, long-term care businesses are in need of strategies to retain an effective workforce, which could depend on improving employee motivation, job satisfaction, and a healthy work environment for nursing staff in the industry (Squires et al., 2015).

This quantitative correlational study stems from the interest in understanding factors involved with high turnover rates among CNAs. Previous researchers addressed the problem of turnover in long-term care facilities, but did not address a comprehensive set of factors that could influence both the immediate and the long-term retention of CNAs (Kayyali, 2014). Previous researchers discovered substantive reasons for CNA turnover, such as relations among nurses, nursing leaders, and other healthcare professionals (Fitzpatrick, 2002). Other studies pertained to regulations affecting nursing assistants (Estabrooks, Squires, Carleton, Cummings, & Norton, 2015), work-related injuries (Khatutsky et al., 2012), workplace environmental factors (Qin, Kurowski, Gore & Punnett, 2014), motivation, and job satisfaction among CNAs (Choi & Johantgen, 2012). To build on these prior studies, this quantitative correlational study includes surveys administered to CNAs to obtain data about employee compensation, engagement, job satisfaction, motivation, and work environment, with the intent to uncover any relationships between those factors and employee turnover that affects the nature of the business.

Background to the Problem

CNAs are the majority of the nursing staff who help long-term care residents with most of their daily activities, including eating, grooming, bathing, ambulation, and toiletry needs. There is a growing long-term care facility population, accompanied by a shrinking pool of long-term care workers, creating challenges for leaders in the long-care industry (Khatutsky et al., 2012). If long-term care facilities are unable to retain successful and experienced employees, especially employees who specialize in providing daily elder care, it is unlikely that the organization will prosper (Kayyali, 2014).

The ability to retain experienced professionals in the workforce is one measurement of success for many companies. Employee turnover has been a challenging issue, and the negative impact has been a focus of management in almost every business sector (Griffeth, Lee & Hom, 2012). Organizational leaders endure numerous challenges when trying to alleviate high turnover rates within the healthcare industry (Kayyali, 2014).

Several issues developed over the years regarding high turnover rates, the hiring process of CNAs, and the retention of these skilled workers within the long-term care industry (Kayyali, 2014). CNAs and registered nurses are pivotal in the nursing home and healthcare industry, yet common views are that CNAs are inferior to most colleagues, earning relatively lower pay based on education and training experiences that are more limited (Ellenbecker & Cushman, 2012). These issues produce a hostile environment leading to high turnover rates and unexpected outcomes such as abuse within the facilities (Gruss, McCann, Edelman & Farran, 2004).

Long-term care facilities endure problems due to the high rate turnover (Kutney-Lee, Sloane, & Aiken, 2013). These issues affect an organization's profitability, leading to significant

costs associated with the expenses of training the replacements (Kutney-Lee et al., 2013). The problem is turnover is pervasive and costly throughout healthcare; therefore, analyzing it with the intention to determine solutions is a necessary step and one that will potentially lead to corrective measures (Kavanagh, Cimiotti, Abusalem & Coty, 2012).

Several prior researchers studied job satisfaction focused on CNAs, but failed to address the issues that cause job dissatisfaction leading to nursing home abuse, declines in profits, and high employee turnover (Choi & Johantgen, 2012; Davis, 2014; Kim, 2012). A review of the literature led to the conclusion that long-term care leaders may overlook how important a positive work environment is for CNAs and their patients (Ghorbanian et al., 2012). Therefore, this study helps fill a gap pertaining to business practices to help leaders access the necessary knowledge about effective practices to retain these skilled workers. Leaders may also gain an understanding of the advantages of job satisfaction, engagement, motivation, and the work environment, including potentially reducing costly labor disputes and turnover (Qin et al., 2014).

Problem Statement

Employee turnover costs businesses, including long-term care facilities, over \$25 billion on an annual basis (James & Matthew, 2012). Between 2001 and 2011, turnover rates within the United States increased by 120% per month (Bureau of Labor Statistics, 2012). Within the long-term care industry, the turnover rate among nursing assistants was 31% higher compared to other nursing staff in 2012, resulting in added operational expenses between \$22,000 and \$63,000 per individual (American Health Care Association, 2012). The general business problem is that some long-term care facilities have high turnover rates among its employees that result in costly business expenses and decreases profitability and productivity. The specific business problem is that some long-term care facility leaders have limited information about the relationship between compensation, engagement, job satisfaction, motivation, and work environment that leads to high CNA turnover.

Research Question

What is the relationship between employee compensation, engagement, job satisfaction, motivation, work environment, and employee turnover intention of CNAs working in the long-term care industry?

Hypotheses

- H_01 : There is no relationship between employee compensation, engagement, job satisfaction, motivation, work environment, and employee turnover intention in the long-term care industry.
- H_11 : There is a relationship between employee compensation, engagement, job satisfaction, motivation, work environment, and employee turnover intention in the long-term care industry.

Theory

The motivation-hygiene theory, also called the two-factor theory, initially advanced by the work of Herzberg, Mausner and Snyderman (1959), represents the theoretical framework for understanding the underlying issues that may relate to employee turnover intention among CNAs. Based on previous research showing the relevance of motivation and job satisfaction to

employee retention in other industries, the Herzberg theory encompasses motivational constructs affecting job satisfaction. These motivational constructs include (a) achievement, (b) recognition, (c) employees' perception, (d) responsibility, (e) advancement, and (f) possibility of growth. In addition, Herzberg outlined (a) job security, (b) organization commitment, (c) work environment or conditions, (d) working relationships, (e) supervision, and (f) incentive as hygiene constructs affecting employees' levels of job dissatisfaction. The independent variables identified in Herzberg's motivation-hygiene theory are measurable using multifaceted motivational-based questionnaires to predict employee turnover intentions. The constructs contain elements that pertain to employees' perceptions of work environments that could potentially affect motivations addressed in the theory. Previous researchers applied the Herzberg theory to examine related variables that influence compensation, engagement, job satisfaction, motivation, work environment, and employee turnover (Davis, 2013). This two-factor theory has the potential to serve as a foundation for explaining employee motivation and engagement as factors that may relate to changes in turnover (Kelleher, 2011). Therefore, Herzberg's theory represents the framework for investigating the relationship of employee compensation, engagement, job satisfaction, motivation, work environment, and turnover rates in the employment of CNAs in long-term care facilities.

Review of Literature

High CNA Turnover

Within the United States, employee turnover costs organizations \$25 billion a year (James & Matthew, 2012). An increase in employee turnover affects an organization's finances and the productivity. According to James and Mathew (2012), an increase in employee turnover can negatively affect the productivity and talent sustainability of an organization. Castle and Engberg (2005) found that the national annual turnover rates of nursing assistants were already at a significant high of 400%. This indicated that a large number of direct care employees voluntarily leave their jobs in long-term care facilities. As a result, residents experience adverse effects, both physically and emotionally, from interruptions in care, inexperienced temporary workers, as well as lower dedication of care staff (Castle & Engberg, 2005).

The high turnover rates of CNAs are a problem, because residents usually establish personal relationships with direct caregivers (McQueen, 2012). These intimate relationships generate emotionally oriented care. Andersen and Havaei (2015) put forward that CNAs form familial feelings for the residents they care for, which develop out of their desire to help others. The presumption is that this desire is the primary motivational factor for CNAs (Andersen & Havaei, 2015). According to the 2008 report from the Center for Disease Control and Prevention (CDC), this desire does not prevent high CNA turnover rates. The CDC found that 37.2% of CNAs left their jobs because of insufficient compensation. The rest leave this employment field because they do not like the policies of the nursing homes, are burned out, do not receive enough benefits, and do not have strong working relationships with their colleagues or supervisors (Center for Disease Control and Prevention, 2008). However, the most recent survey published by the Florida Center for Nursing (2016) showed that CNA turnover might have improved in certain states over the years since the CDC reported their previous findings, indicating the need for renewed state-specific research in CNA turnover intention.

Researchers also attributed high turnover rates to specialized memory care units (Hunter et al., 2015; Lim et al., 2015.) Caregivers for patients with Alzheimer's disease, in particular, as well as other forms of dementias and age-related cognitive declines, feel burned out the most and relatively dissatisfied with their jobs (McQueen, 2012). Increased stress levels, as well as educational deficits, may also lead to high turnover rates among CNAs (Dietrich et al., 2014; Sjögren et al., 2015). Sjögren et al. (2015) claimed that the workload of these care assistants could affect the health of the patients.

Compensation

According to the CDC (2008), 70% of 304,400 CNAs reported through surveys that they left their jobs because of low salaries. The report implied that they desired to seek better employment elsewhere or abandon their jobs because of their socioeconomic status. Dill, Morgan, and Marshall (2013) claimed that even though there is a strong link between job satisfaction, intention to leave, and retention, these theories might not adequately capture the plight of low-wage health care workers, such as CNAs.

Dill et al. (2013) asserted that low-wage workers might have weaker capacity to act on their intentions to leave because they do not have the same resources available to higher-wage workers and need the income to support their households. Dill et al. (2013) looked at the relationship between job satisfaction, intention, and retention of CNAs in nursing homes and how contingency factors affected their plans to leave. Contingency factors in the Dill et al.(2013) study were resource-related constraints, such as being single parents with low income, which could affect employment decisions even if satisfied, leading to intentions of leaving. Based on survey data gathered from 315 nursing assistants across 18 nursing homes in a U.S. Southern state, the results revealed that job satisfaction and other perceived job characteristics, such as workload and quality of care, all affected nurses' intentions to stay at their jobs. However, the findings indicated that job satisfaction and employment intentions did not necessarily make a CNAs leave or act as significant predictors of retention. Rather, contingency factors, such as being the primary breadwinner in one's household, as well as other individual motivators acted as reliable predictors of CNA retention. Findings showed that low-wage health care employees such as CNAs left their jobs for reasons that turnover theories largely failed to stipulate, and that researchers can use employment intentions as proxies for measuring turnover.

Researchers suggested that family-sustaining wages, as well as full-time employment, could mitigate high turnover rates. However, other studies showed that minor wage increases would do nothing to reverse high turnover rates. Most long-term administrators believe that increasing compensation for CNAs would only lead to bidding wars between competing nursing homes or facilities and would just aggravate the problem with high turnover rates (Fitzpatrick, 2002). Apart from low salaries, limited employer-sponsored benefits cause high CNA turnover rates. CNAs who are not satisfied with employer-sponsored benefits seek other employment. However, literature found that most long-term care administrators are not keen on increasing the benefits to the employees because of dependence on public reimbursement. The administrators claimed that this type of reimbursement prevents most facilities from increasing the salaries of their employees, particularly CNAs (McGilton, Boscart, Brown & Bowers, 2014).

Because for-profit facilities want to maximize profits and minimize their costs, for-profit facilities only purchase a limited amount of supplies, making it challenging for CNAs to do more

for their patients (Woodhead, Northrop & Edelstein, 2014). As the facilities reduce more items that can enhance the care given by CNAs so that they can serve the “bottom line”, CNAs’ stressors increase. According to Woodhead et al. (2014), in large for-profit facilities, the organization does not give enough attention to the needs of CNAs and other low-level staff; the workers do not receive the recognition they deserve, and reward systems are usually nonexistent or meager. Woodhead et al. compared these for-profit facilities to nonprofit facilities with fewer beds accommodating fewer patients, so the number of CNAs is more proportionate to the number of patients they serve. In addition, administrators of nonprofit facilities are more amenable to rewarding the CNAs for their individual efforts (Woodhead et al., 2014).

Facilities and facility administrators have many pressures and difficulties in keeping their program operational (Lerman, Eyster & Kuehn, 2014; Skirbekk & Nortvedt, 2014). These facilities struggle with budgetary constraints, both from cuts in government funding and the inability of patients to pay for their care, adding yet another factor to their inability to offer employees higher pay incentives to stay. Budgetary issues are not the only issue in employee attraction and retention, but researchers cannot ignore their impact (Lerman et al., 2014; Skirbekk & Nortvedt, 2014).

Employee Motivation

There are also several organizational and job-related factors linked to high turnover rates. The CDC (2008) found that 15.6% of 304, 4000 surveyed CNAs leave their jobs because they did not like the policies put in place in their facilities, as well as their working conditions. Studies showed that for-profit nursing homes or facilities are more likely to have higher turnover rates because of the policies in place (McGilton et al., 2014; Woodhead et al., 2014). CNAs felt that for-profit facilities prioritized economic gain for their services, rather than the patients’ clinical outcomes and the care they must receive. For-profit facilities usually have more patients than the nursing staff, or more beds to accept patients than CNAs to ensure profits. However, this only leads to increased risk for burnout of the CNAs (Woodhead et al., 2014).

Research has also found distrust of management to lead to high CNA turnover. Studies have found that some CNAs do not trust their management because of perceived workplace surveillance and because management emphasizes differences in employee statuses of the CNAs—that is, whether the organization considers them higher-level employees or lower-level ones (Jang et al., 2015). CNAs do not trust management because they feel that they receive disrespect from the management. Most CNAs perceive themselves as being at the bottom of the tier, affecting their job satisfaction levels (Jang et al., 2015). Turnover rates of CNAs may also result from how leaders interact with ground staff (Jang et al., 2015). According to Hayes et al. (2012), if CNAs perceive that management supports them by communicating with them and teaming up with them, turnover rates would decrease.

Job Satisfaction

Choi and Johantgen (2012) also looked at what factors can trigger high CNA turnover rate, emphasizing the need to recruit and retain CNAs in nursing homes because of their significant roles in delivering high-quality care to residents. According to Choi and Johantgen, nursing homes provide the majority of direct care, but hiring and retaining CNAs is not an easy process. Retaining CNAs is critical because they provide high-quality resident care in nursing homes. Choi and

Johantgen investigated how work-related and personal factors could affect CNAs' decision to leave by using data from the 2004 National Nursing Home Survey, as well as the 2004 National Nursing Assistant Survey. Results revealed that personal factors of the CNAs' ages, educational backgrounds, and job histories are all factors related to CNAs' decision to leave. However, these factors do not affect CNAs' level of job satisfaction. A unique finding of this study is that supervision can significantly predict CNAs' decision to leave, as well as their levels of job satisfaction (Choi & Johantgen, 2012).

Choi and Johantgen (2012) found that CNAs who perceive that they have supportive managers tend to have more job satisfaction. The presence of nursing home violence can also lead CNAs to leave their job. Research shows that workplace violence has become more prevalent. An earlier study by Hall, Hall, and Chapman (2009) found that around 27% of workplace violence takes place at long-term care facilities. Workplace violence and aggressive behavior can range from repetitive demands, verbal outbursts from the bosses, and sexual harassment in the workplace (Hall et al., 2009).

According to Hall et al. (2009), the violence takes place during close CNA and resident contact, such as when the CNAs are transferring and turning, dressing, feeding, and bathing the resident. Some residents resort to hair pulling, biting, punching, kicking, and even spitting. Studies showed that workplace violence and aggression push CNAs to leave their posts. Most who experienced this suffered from increased stress and latent anger. If CNAs do not leave, these feelings of anger and stress would still affect CNA-to-resident interactions. The literature showed that this might push some to show abusive behaviors toward the residents. Some CNAs would start ignoring the needs of their residents, and some would just keep incurring absences (Hall et al., 2009).

Constant exposure to such negative behavior from their residents makes CNAs unsatisfied with their jobs and less committed to the residents (Morgan et al., 2012). In particular, Morgan et al. (2012) surveyed 83 nursing assistants exposed to aggression and physical violence from residents. From the responses, Morgan et al. found that registered nurses and CNAs exposed to violence of their residents are less likely to form intimate relationships with their residents, which means the loss of the benefits from such a close and committed relationship between nurses and residents. Because they fail to form caring relationships with the residents, their services would lack personal touch and intimacy, which can negatively affect the overall quality of life of nursing home residents. In addition, CNAs exposed to violence of their residents are dissatisfied with their job, which pushes them to make the decision to leave their posts. Not having the ability to discuss the aggressive and violent behavior of their residents makes the feelings of indifference and dissatisfaction stronger.

Henry (2014) claimed that high annual turnover rates of CNAs are a systematic problem. As such, it is important to understand the reasons why CNAs leave, as their services enable sick or frail persons to perform mundane daily activities. Instead of looking at factors such as salary, benefits, and promotion opportunities, Henry (2014) looked at whether CNAs' perceived belongingness, attachment to their organizations, as well as self-efficacy, affected their intentions to leave their job. Using theories such as Tajfel and Turner's social identity and Bandura's goal attainment theories and gathering data from 117 CNAs employed in nursing homes across Midwest state, findings showed that organizational identity, affective commitment, job satisfaction, and self-efficacy all significantly shape intention to leave their jobs.

Henry (2014), therefore, called for employers to put into place a formal process that would train and retrain CNAs so that they become more efficient and committed to their jobs. In addition, Henry (2014) highlighted the need to have formal workgroups in improving job satisfaction and decreased job turnover.

Employee Engagement

Zhang, Punnett, and Gore (2014) claimed that high employee turnover is a significant problem in long-term care settings and can be quite costly if not resolved. Intention to leave is a reliable indicator of actual turnover by past literature, but Zhang et al. claimed that researchers have not yet comprehensively studied actuarial predictors for nursing assistants. Zhang et al. employed a quantitative design which looked at the relationships among employees' working conditions, mental health, and intention to leave among 1,589 employees across 18 for-profit nursing homes; results indicated that employees' intentions to leave can be affected by employees' perceptions in certain workplace features. In particular, employees who perceive that their workplaces foster interpersonal relationships, respect their employees, and empower their employees to be part of the decision-making processes would have fewer or no intentions to leave.

Moreover, according to Hayes et al. (2012), CNAs may be less likely to leave if they receive the opportunity to take part in care planning, because this validates their importance as well as their relationships with the residents. McQueen (2012) discussed the lack of leadership acceptance and outdated or inappropriate facility policies as problematic in long-term care facilities. Positive management can lead to a rewarding and satisfying workplace environment for CNAs. If supportive managers were leading them effectively, the CNAs would feel that they are part of their work community and would feel motivated (Hayes et al., 2012).

Workplace Environment

Studies surfaced from the healthcare industry, indicating employees' working conditions also affected their intentions to leave (Kramer, Halfer, Maguire & Schmalenberg, 2012; Kutney-Lee et al., 2013). These studies did not exclude CNAs. Gruss et al. (2004) showed that non-empowered work environments could lead to high job stress and increase CNAs' desire to leave their jobs; for example, CNAs exposed to high amount of stress were more likely to quit. This is a significant problem in light of the increasing demand for long-term care workers. Gruss et al. looked at how job stress among dementia care CNAs differentiated the levels and types of their stress according to whether they are working in empowered LTC environments or not. Results showed that the caregivers employed in empowered environments experienced more resident-focused stressors than those in non-empowered dementia care units, who experienced more job-focused stressors. Resident-centered stress revolved around problems linked to accidents, behavioral problems, and death and dying situations of their patients. On the other hand, job-focused stressors were problems in salaries, workloads, and interpersonal conflicts, likely to lead to higher intentions to leave.

More recently, Zhang et al. (2013) showed that working conditions could significantly affect both the mental health of CNAs and their intentions to leave. Data from 1,589 employees across 18 for-profit nursing homes for a quantitative analysis using Poisson regression modeling indicated that employees who cited at least four positive features in their workplace were less

likely to desire or intent to leave their place of work (Zhang et al., 2013). Usually, features such as good interpersonal relationships, respectful environments, and empowering conditions where employees can contribute to decision-making processes are those that make nursing assistants less likely to leave (Zhang et al., 2013).

Methodology

A quantitative method involves examination of numerical or otherwise measurable and quantifiable data pertaining to constructs in research questions and testing hypotheses. Quantitative methods apply to the examination of known, identified variables among samples of participants who are representatives of broader research populations (Mukaka, 2012). A quantitative method supports the application of inferential statistics permitting inferences from the sample to an entire population (Bryman, 2012). A quantitative method permits a deductive approach through objective analysis of variables and provides an opportunity to reject or to fail to reject the null hypotheses (Mukaka, 2012). The findings of quantitative research are the product of statistical summary and analysis (Mensah, 2014). A quantitative approach was suitable for a study that involved measurable variables, research questions with corresponding hypotheses, and a sample of participants from the long-term care industry. In quantitative research, data collection from the use of surveys or questionnaires with close-ended answer options, representing numerical data, can be more cost-effective and efficient than qualitative data collection and analysis or mixed method approaches that include both quantitative and qualitative data sources (Cirtita & Glaser-Segura, 2012).

Design

This quantitative study has a correlational design, selected with the purpose of examining the relationships between variables. Quantitative designs include experimental, quasi-experimental, and non-experimental designs (Ludlow & Klein, 2014). An experimental approach that, according to Zellmer-Bruhn, Caligiuri, and Thomas (2016) revolves around the manipulation of variables, control groups, and causation, would not be appropriate for this study because there was no intention to manipulate variables, draw conclusions about causation, or involve treatment and control groups. Similarly, the quasi-experimental design includes variables such as age, gender, personality, and ethnicity that cannot be randomly assigned, but still focuses on causation (Cokley & Awad, 2013).

Correlation research does not require experimental manipulation of variables or assignments to research groups (Cokley & Awad, 2013). According to Mukaka (2012), a correlational design is a type of inferential quantitative research approach that involves examining possible relationships among variables instead of causation. A correlational design was appropriate for this study because the purpose was to determine if relationships exist among known variables and to quantify the extent of any relationships among predictor variables and the criterion variable. The use of a regression equation results in statistical findings that lead to conclusions about predictions within the population of the study (Ludlow & Klein, 2014). To quantify the variables for the tests of correlation, the survey instruments consisted of close-ended questions on the Compensation Scale, Utrecht Work Engagement Scale, Job Satisfaction Scale, Work Extrinsic and Intrinsic Motivation Scale, Work Environment Scale, and Employee Turnover Scale. Multiple linear regressions are rigorous analysis techniques to test the

hypotheses and quantify any relationships that exist between the variables in the study (Ansong & Gyensare, 2012).

Population and Sampling

The population for this study consisted of current CNAs with experiences working in long-term care facilities in Florida. All CNAs who work in the state must register with the Florida Board of Nursing (2016), demonstrating their eligibility to work in the field; eligibility includes being at least 18, passing a fingerprinting and criminal background review, earning at least a high school diploma, completing prescribed coursework, and passing the state examination. The Florida Center for Nursing (2016) conducts statewide surveys every two years to study trends in nursing, reporting findings on the thousands of CNAs and other nurses working in the state. According to the 2015 survey results reported by the Florida Center for Nursing, including data for over 11,000 CNAs employed in the state, CNAs represented the majority of care staff (61% of the nurses) in long-term and skilled nursing facilities. The population of CNAs includes of long-term care facilities in Florida. The recruitment of prospective participants occurred within various long-term care facilities operating in Florida. The participants had opportunities to respond to close-ended survey questions, delivered via electronic survey, completed through the established survey link. All participants were age 18 or older, currently employed in long-term care facilities with at least two years of long-term care experience. Convenience samples of 157 participants were used.

Instrumentation

The selected survey instruments used for the measurement of the five-predictor variables in this quantitative correlation study were (a) Compensation Scale, (b) Utrecht Work Employee Engagement Scale, (c) Job Satisfaction Scale, and (d) Work Extrinsic and Intrinsic Motivation Scale, and (e) Work Environment Scale. The Turnover Intention Scale was the means to measure the criterion variable. The six survey instruments, used in previous studies, demonstrated both reliability and validity. Consideration of instrument validity and reliability is an inherent part of any rigorous quantitative research effort; using the Cronbach's coefficient alpha indicates whether there is a high level of reliability and consistency (Ude, 2015). According to Ude (2015), a Cronbach's coefficient alpha score indicates reliability and consistency. The six scales selected have registered Cronbach's coefficient alphas of .72 to .934, which were indicators of acceptable to excellent levels of reliability. There were no adjustments or revisions made to the scales, due to the established reliability and validity measurements. The instruments were adopted, with author's permission, to collect data from the target population who were working in a service industry. All of the scales involved Likert-type answer formats. The points along a rating scale may not represent equal intervals; however, rating scale data are closer to interval than ordinal scale data, and researchers may use rating scale data as interval data in statistical analyses (Meyers, Gamst & Guarino, 2013).

Data Analysis

Multiple linear regression analysis was the selected data analysis technique used to examine the relationships between the variables. The three phases of data analysis are (a) descriptive and inferential data analysis, (b) multiple linear regression data analysis, and (c) the acceptance and rejection of the hypothesis. There was no claim that one variable is dependent

while other variables are independent (Mukaka, 2012). Instead, Ludlow and Klein (2014) advised researchers to use the terms predictor and criterion variables in the multiple linear regression study of relationships and associations among variables. In this study, there may be relationships between the criterion variable of employee turnover intention and the predictor variables of employee compensation, engagement, job satisfaction, motivation, and work environment.

Descriptive Results

Table 1 displays the results of the descriptive analysis. Participants' views on the predictor variables were indicated as follows:

- (i) Employee compensation scores ($M=13.64$, $SD=3.83$) indicating that the participants collectively expressed less satisfactory views of their compensation than neutral or positive views.
- (ii) Employee engagement scores ($M=54.79$, $SD=11.13$) was higher than the midpoint or neutral point of 48, indicating that the participants collectively expressed more satisfactory than neutral or negative views of the elements involved with their perceptions of work engagement in their organizations.
- (iii) Employee job satisfaction scores ($M=32.99$, $SD = 6.42$) indicating that the participants collectively expressed more satisfactory than neutral or negative views of the elements involved with their levels of job satisfaction in their organizations.
- (iv) Employee motivation scores ($M=34.28$, $SD= 6.15$) indicating that the participants collectively expressed more satisfactory than neutral or negative views of the motivation they experienced at work within their organizations.
- (v) Employee work environment scores ($M= 32.28$, $SD= 5.13$) indicating that the participants collectively expressed more satisfactory than neutral or negative views of the elements involved with the work environments of their organizations.
- (vi) Employee turnover intention score ($M= 9.67$, $SD = 2.95$) indicating that the participants collectively expressed more turnover intention than neutral views of the elements of the survey that reflected turnover intention.

Table 1
Descriptive Results

Value	Compensation	Engagement	Satisfaction	Motivation	Environment	Turnover Intention
Mean	13.64	54.79	32.99	34.28	32.28	9.67
Variance	14.65	124.00	41.31	37.92	26.40	8.72
Standard Deviation	3.83	11.13	6.42	6.15	5.13	2.95
Range	18	56	32	31	32	13
Median	14	54	33	34	32	10
Skewness	-.22	.12	-.08	-.10	.10	-.24

Inferential Statistics Results

Table 2 includes a summary of the tests for correlation performed between the variables in the study. Spearman's correlation tests applied to each of the variables in relation to turnover intention ($N = 157$, $df = 155$), which is ideal for Likert type data and data that may otherwise be suitable for non-parametric tests. Correlation tests of the compensation with turnover intention for the entire sample showed that there is a statistically significant negative correlation between compensation and turnover intention, $r(155) = -.42$, $p < .01$. There is a statistically significant negative correlation between work engagement and turnover intention, $r(155) = -.29$, $p < .01$. A statistically significant negative correlation exists between job satisfaction and turnover intention, $r(155) = -.35$, $p < .01$. There is also a statistically significant negative correlation between work environment and turnover intention, $r(155) = -.25$, $p < .01$. Based on these tests, the conclusion is that the strengths of the negative correlations, in order from the strongest to the weakest, are compensation, job satisfaction, engagement, and work environment, with all these variables inversely related to turnover intention. The weak positive correlation between motivation and turnover intention was not statistically significant.

Table 2

Correlations with Employee Turnover Intention

Variable	Correlation Coefficient	P
Compensation	-.42	< .01
Engagement	-.29	< .01
Job Satisfaction	-.35	< .01
Motivation	.10	.21
Work Environment	-.25	< .01

Multiple Regression Results

Table 3 includes the results of the multiple regression tests. Focusing on the p-value of each predictor variable, each of the variables, with the exception of motivation, contributes to the model. As shown in Table 3, compensation, job satisfaction, engagement, and work environment had significant negative regression weights, indicating that employees with lower scores on these scales were expected to have higher turnover intention, after controlling for the other variables in the model. Employee motivation did not contribute any significant regression weight to the multiple regression model. Because R^2 is greater than zero, the model helps explain variability around the mean. In this study, the model helps explain approximately 34% of the variability, with all of the variables except for motivator contributing significantly to the model.

The multiple regression equation is of the general form, $Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5$, where a is a starting-point constant analogous to the intercept in a simple two-variable regression, and b_1 , b_2 , b_3 , b_4 , and b_5 are the unstandardized regression weights for X_1 , X_2 , X_3 , X_4 , and X_5 , each analogous to the slope in a simple two-variable regression. In the present analysis, $TI = 17.28 + (-.25)(C) + (-.06)(JS) + (-.04)(ENG) + (.13)(M) + (-.12)(ENV)$, where TI is turnover intention, C is compensation, JS is job satisfaction, ENG is engagement, M is motivation, and ENV is environment.

Multiple regression allows for the control of the other possible predictor variables in the model intended to help explain turnover intention of the long-term care employees in this study.

The multiple regression model with all five predictors (compensation, job satisfaction, engagement, work environment, and motivation) produced $R^2 = .34$, $F(5, 151) = 15.22$, $p < .0001$. The model accounts for significantly more variance in turnover intention scores for the participants in the study than would be expected by chance.

Table 3
Multiple Regression Model Weights

	Unstandardized Regression Weights (b)	Standardized Regression Weights (B)	T-STAT	P
Compensation	-.25	-.33	4.14	< .10
Job Satisfaction	-.06	-.14	6.46	< .10
Engagement	-.04	-.17	-1.48	< .10
Motivation	.13	.28	.610	0.27
Environment	-.12	-.21	-1.35	< .10
Multiple $R^2 = 0.34$				
Adjusted Multiple $R^2 = 0.32$				

Discussion/Implications

The findings of this study provide management with ways of assessing and analyzing each factor based on the magnitude of the relationship. Through analysis, managers can provide their recommendations to improve the situations within that particular organization. With the appropriate plans, managers may reduce or prevent employee turnover from occurring resulting in financial sustainability.

The potential implication of social change contributed to the study's outcome was the knowledge of factors that are affecting the turnover of CNAs in the LTC industry in Florida. The findings from this study can assist leaders and healthcare administrators in gaining a better understanding of the impacts that compensation, engagement, job satisfaction, motivation, and work environment have on the employees' intent to leave. In addition, the results of this study can help towards developing and creating strategies to address the issues in an effort to reduce turnover rates. The optimal use of these results may also lead to increased patient commitment, potentially reducing the costs of care that affect the lives of the long-term care residents, concerned family members, and significant others while improving the profits for an organization. If organizational business performance is sustainable, then long-term business growth can achieve successfully (Bebe, 2016). In turn, if individuals are employed the crime rates, and poverty levels will decrease, which results in communities that will benefit from a safe, healthy, and friendly environment (Bebe, 2016).

Findings/Conclusion

Employee turnover is a costly expense to organizations in almost every sector. Ramoo, Abdullah, and Piaw (2013) indicated that turnover is an ongoing issue among healthcare professionals. The CNAs are valuable employees that provide daily assistance to the patients.

Therefore, this loss in human capital can cause disruptions in an organization's performance as well as profitability (Hayes, 2015). The purpose of this quantitative correlational study was to examine the relationship of employee compensation, engagement, job satisfaction, motivation, work environment, and employee turnover intentions to answer the given hypotheses. The study utilized Likert-type scales to determine if there was a significance relationship between the predictor variables and the criterion variable.

This research revolved around five hypotheses tested through multiple regression and correlation statistics. Table 4 includes a summary of the results of the statistical tests for relationships among the variables. Based on those statistical tests, four of the five null hypotheses were rejected and one null hypothesis was not rejected. Based on the data collected from the long-term employees in this study ($N = 157$), there was a statistically significant relationship between employee compensation, employee engagement, job satisfaction, work environment, and employee turnover intention. There was no statistically significant relationship between employee motivation and employee turnover intention in the long-term care industry. Multiple regression tests indicated that employee compensation, engagement, job satisfaction, and work environment had significant negative regression weights, indicating employees with higher scores on these scales would be expected to have lower turnover intention scores. Motivation did not contribute to the multiple regression model. The multiple regression model with all five predictors helped explain more variance in turnover intention than would be explained by chance. The results of this study were consistent with the previous studies with the exception of motivation. Most researchers found that motivation had a statistically significant relationship to turnover intentions.

Table 4

Summary of Findings

Hypothesis	Decision, Null Hypothesis	Alternative Hypothesis
Hypothesis 1	Reject the null hypothesis	There is a relationship between employee compensation and employee turnover intention in the long-term care industry.
Hypothesis 2	Reject the null hypothesis	There is a relationship between employee engagement and employee turnover intention in the long-term care industry.
Hypothesis 3	Reject the null hypothesis	There is a relationship between employee job satisfaction and employee turnover intention in the long-term care industry.
Hypothesis 4	Failure to reject the null hypothesis that there is no relationship between employee motivation and employee	

	turnover intention in the long-term care industry.	
Hypothesis 5	Reject the null hypothesis	There is a relationship between work environment and employee turnover intention in the long-term care industry.

The Herzberg (1959) motivational-theory served the basis for this study, supported by the rejection of four of the five null hypotheses tested in this study. However, motivation was the only variable that was accepted. The relationships found in this study should serve as a starting point for future research studies. This will allow researchers to explore ways to reduce turnover among CNAs in the long-term care industry, and provide researchers with a broader view of obtaining the personal thoughts of the CNAs as it relates to employee turnover.

Limitations and Future Research

The gap in literature showed a lack of studies that specifically identified organizational strategies and commitment of healthcare workers such as CNAs. Several studies identified turnover intentions in relation to registered nurses and physicians. The studies that were identified that discussed CNA turnover intentions were dated and did not provide updated information regarding factors that impact job dissatisfaction. Further research can continue to help build an understanding of the significant predictor variables, including compensation, engagement, job satisfaction, and work environment. Addressing these inadequacies require future researchers to incorporate variables such as rewards and incentives, engagement, recognition of individual differences, performance for pay, enhanced communication, and enrichment (Ude, 2015). In addition, as researchers continue to study CNA employee turnover, motivation is a key factor that requires more attention. Motivation is a factor that keeps employees satisfied; therefore, understanding why CNAs lack motivation in their positions can represent another area of valuable future research.

The survey questionnaire was a Likert-type scale where the participants could choose the answer based on the individual's understanding. Therefore, the results are limited, and the participant does not have the ability to express their opinions about the phenomenon. For future studies, a recommendation is to add employee turnover as a factor to explore via a qualitative case study. Conducting a case study would add personal interaction to provide subjective perceptions and allow for follow-up questions to this survey. In addition, the participants could explain their experiences in detail other than answering questions using an ordinal scale.

The limitation of this study was the geographic boundaries associated with using just employees in the state of Florida. I would recommend that further research occur in different states in the United States. Another recommendation would be incorporating additional demographic characteristics and the level of education the employees have obtained. This will provide additional feedback and views of those employees who work in different facilities across the nation. It would be interesting to know how race, ethnicity, and education would influence the relationship between the variables of this study. Lastly, future research might involve repeating this study using higher-level employees in the long-term care industry to understand

their concerns as they compare to CNAs and ways to retain these employees. The higher-level employees such as registered nurses, physical therapist, and licensed practitioner nurses might have direct personal and professional relationships with the CNAs and can share an understanding of their concerns and mutual experiences.

References

- American Health Care Association, the 2012 Vacancy, Retention, and Turnover Survey. (2012). Retrieved from <http://www.ahcancal.org>
- Andersen, E., & Havaei, F. (2015). Measuring relational care in nursing homes: Psychometric evaluation of the relational care scale. *Journal of Nursing Measurement, 23*, 82-95. Retrieved from <https://www.ncbi.nlm.nih.gov>
- Ansong, A., & Gyensare, M. (2012). Determinants of university working-students' financial literacy at the University of Cape Coast, Ghana. *International Journal of Business and Management, 7*, 126-133. doi:10.5539/ijbm.v7n9p126
- Bebe, I. (2016). *Employee Turnover Intention in the U.S. Fast Food Industry*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses. (Order No. 10016173)
- Bryman, A. (2012). *Social research methods*. New York, NY: Oxford University Press.
- Bureau of Labor Statistics. (2012). *United States Department of Labor: Job openings and labor turnover summary*. Retrieved from <http://www.bls.gov>
- Castle, N. G., & Engberg, J. (2007). The influence of staffing characteristics on quality of care in nursing homes. *Health Services Research, 42*, 1822-1847. doi:10.1111/j.1475-6773.2007.00704.x
- Choi, J., & Johantgen, M. (2012). The importance of supervision in retention of CNAs. *Research in Nursing & Health, 35*, 187-199. doi:10.1002/nur.21461
- Cirtita, H., & Glaser-Segura, D. (2012). Measuring downstream supply chain performance. *Journal of Manufacturing Technology Management, 23*(3), 299-314. doi:10.1108/17410381211217380
- Cokley, K., & Awad, G. (2013). In defense of quantitative methods: Using the "Master's Tools" to promote social justice. *Journal of Social Action in Counseling & Psychology, 5*(2), 26-41. Retrieved from <http://www.jsacp.tumblr.com>
- Davis, L. (2014). *Manager leadership behaviors, employee job satisfaction, and turnover within the federal government* (Doctoral dissertation). Available from ProQuest Dissertations and Theses. (AAT 3617728)
- Davis, T. L. (2013). *A qualitative study of the effects of employee retention on the organization* (Doctoral dissertation). Available from ProQuest Dissertations and Theses. (AAT 1313773596)
- Dietrich, U., Rößler, M., Bellmann, M., Scharfe, J., & Kirch, W. (2014). Work load and health impairments of inpatient nursing care personnel with particular focus on the care of people with dementia. *Journal of Public Health, 22*, 395-405. doi:10.1007/s10389-014-0632-9
- Dill, J. S., Morgan, J. C., & Marshall, V. W. (2013). Contingency, employment intentions, and retention of vulnerable low-wage workers: An examination of nursing assistants in nursing homes. *The Gerontologist, 53*, 222-234. doi:10.1093/geront/gns085
- Dinger, M., Thatcher, J. B., Stepina, L. P., & Craig, K. (2012). The grass is always

- 123 greener on the other side: A test of present and alternative job utility on IT professional's turnover. *IEEE Transactions on Engineering Management*, 59, 364-378. doi:10.1109/TEM.2011.2153204
- Ellenbecker, C. H., & Cushman, M. (2012). Home healthcare nurse retention and patient outcome model: Discussion and model development. *Journal of Advanced Nursing*, 68, 1881-1893. doi:10.1111/j.1365-2648.2011.05889.x
- Estabrooks, C., Squires, J., Carleton, H., Cummings, G., & Norton, P. (2015). Who is looking after mom and dad? Unregulated workers in Canadian long-term care homes. *Canadian Journal of Aging*, 34(1), 47-59. doi:10.1017/S0714980814000506
- Fitzpatrick, P. G. (2002). Turnover of certified nursing assistants: A major problem for long-term care facilities. *Hospital Topics*, 80(2), 21-25. doi:10.1080/00185860209597991
- Florida Board of Nursing. (2016). *Certified nursing assistant licensing*. Orlando, FL: Florida Board of Nursing Retrieved from <http://floridasnursing.gov>
- Florida Center for Nursing. (2016). *Florida's demand for nurses: 2015 employer survey*. Orlando, FL: Florida Center for Nursing. Retrieved from <https://www.flcenterfornursing.org>
- Ghorbanian, A., Bahadori, M., & Nejati, M. (2012). The relationship between managers' leadership styles and emergency medical technicians' job satisfaction. *Australasian Medical Journal*, 5, 1-7.
- Griffeth, R. Lee, T., Mitchell, T., & Hom, P. (2012). Further clarifying proximal withdrawal states and the turnover criterion space. *Psychological Bulletin*, 138, 859-864. doi:10.1037/a0028897
- Gruss, V., McCann, J. J., Edelman, P., & Farran, C. J. (2004). Job stress among nursing home certified nursing assistants: Comparison of empowered and nonempowered work environments. *Alzheimer's Care Today*, 5, 207-216. Retrieved from <http://journals.lww.com/actjournalonline>
- Hall, R. C., Hall, R. C., & Chapman, M. J. (2009). Nursing home violence: Occurrence, risks, and interventions. *Annals of Long-Term Care: Clinical Care and Aging*, 17, 25-31. Retrieved from <http://www.annalsoflongtermcare.com>
- Hayes, L., O'Brien-Pallas, L., Duffield, C., Shamian, J., Buchan, J., Hughes, F., Spence Laschinger, H., & North, N. (2012). Nurse turnover: A literature review. *International Journal of Nursing Studies*, 49, 887-905. doi:10.1016/j.ijnurstu.2011.10.001
- Hayes, T. (2015). *Demographic characteristics predicting employee turnover intentions* (Doctoral dissertation). Available from ProQuest Dissertations and Theses. (AAT 1734042628)
- Henry, D. A. (2014). *The effects of certified nurse assistants' socialization, onboarding, and turnover*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses. (Accession Order No. 3622536)
- Herzberg, F., Mausner, B., & Snyderman, B. (1959). *The motivation to work* (2nd ed.). New York, NY: Wiley & Sons.
- Hunter, P. V., Hadjistavropoulos, T., Thorpe, L., Lix, L. M., & Malloy, D. C. (2015). The influence of individual and organizational factors on person-centered dementia care. *Aging & Mental Health*, 1-9. doi:10.1080/13607863.2015.1056771
- James, L., & Matthew, L. (2012). Employee retention strategies. IT Industry. *SCMS Journal of Indian Management*, 9, 79-87. Retrieved from <http://www.scmsgroup.org/scmsjim>

- Jang, Y., Lee, A. A., Zadrozny, M., Bae, S. H., Kim, M. T., & Marti, N. C. (2015). Determinants of job satisfaction and turnover intent in home health workers. The role of job demands and resources. *Journal of Applied Gerontology, 30*, 524-534. doi:10.1177/0733464815586059
- Kavanagh, K., Cimiotti, J., Abusalem, S., & Coty, M. (2012). Moving healthcare quality forward with nursing-sensitive value-based purchasing. *Journal of Nursing Scholarship, 44*, 385-395. doi:10.1111/j.1547-5069.2012.01469.x
- Kayyali, A. (2014). The impact of turnover in nursing homes. *American Journal of Nursing, 114*(9), 69-70. doi:10.1097/01.NAJ.0000453762.61882.82
- Kelleher, B. (2011). Employee engagement and retention. *MWorld, 10*(1), 36-39. Retrieved from <http://www.princeton.com/whats-new/mworld-journal-american-management-association>
- Khatutsky, G., Wiener, J. M., Anderson, W. L., & Porell, F.W. (2012). *Work-related injuries among certified nursing assistants working in US nursing homes*. Research Triangle Park, NC: RTI Press.
- Kim, S. (2012). The impact of human resource management on state government IT employee turnover intentions. *Public Personnel Management, 41*, 257-279. doi:10.1177/009102601204100204
- Kutney-Lee, A., Wu, E. S., Sloane, D. M., & Aiken, L. H. (2013). Changes in hospital nurse work environments and nurse job outcomes: An analysis of panel data. *International Journal of Nursing Studies, 50*, 195-201. doi:10.1016/j.ijnurstu.2012.07.014
- Lerman, R. I., Eyster, L., & Kuehn, D. (2014). Can we upgrade low-skill, low-wage occupations? The case of apprenticeships in the long-term care occupations. *Journal of Women, Politics & Policy, 35*, 110-132. doi:10.1080/1554477X.2014.890835
- Lin, M. H., Shih, W. M. J., Huang, T. S., & Hsu, H. C. (2014). Effects of empowering in-service training program to improve job satisfaction among nurse aides in long term care facilities. *International Journal of Management, IT and Engineering, 4*, 439-455. Retrieved from <http://www.aabri.com/jmmr.html>
- Ludlow, L., & Klein, K. (2014). Suppresssor variables: The difference between 'is' versus 'acting as.' *Journal of Statistics Education, 22*(2), 1-28. Retrieved from www.amstat.org/publications/jse
- McGilton, K. S., Boscart, V. M., Brown, M., & Bowers, B. (2014). Making tradeoffs between the reasons to leave and reasons to stay employed in long-term care homes: Perspectives of licensed nursing staff. *International Journal of Nursing Studies, 51*, 917-926. doi:10.1016/j.ijnurstu.2013.10.015
- McQueen, E. (2012). *Humor-related social exchanges and mental health in assisted living residents* (Doctoral dissertation). Available from ProQuest Digital Dissertations and Theses database. (AAT 299).
- Mensah, R. D. (2014). *Effects of human resources management practices on retention of employee in the banking industry in Accra, Ghana* (Doctoral dissertation). Available from ProQuest Digital Dissertations and Theses database. (AAT 3159996).
- Meyers, L. S., Gamst, G., & Guarino, A. J. (2013). *Applied multivariate research: Design and interpretation*. Los Angeles, CA: Sage Publications.
- Morgan, D. G., Cammer, A., Stewart, N. J., Crossley, M., D'Arcy, C., Forbes, D. A., & Karunanayake, C. (2012). Nursing aide reports of combative behavior by residents with dementia: Results

- from a detailed prospective incident diary. *Journal of the American Medical Directors Association*, 13, 220-227. doi:10.1016/j.jamda.2011.07.003
- Mukaka, M. (2012). A guide to appropriate use of correlation coefficient in medical research. *Malawi Medical Journal*, 24(3), 69-71. Retrieved from <http://www.mmj.medcol.mw>
- Qin, J., Kurowski, A., Gore, R., & Punnett, L. (2014). The impact of workplace factors on filing of workers' compensation claims among nursing home workers. *Biomedical Central*, 15, 29-44. doi:10.1186/1471-2474-15-29
- Ramoo, V., Abdullah, K., & Piaw, C. (2013). The relationship between job satisfaction and intention to leave current employment among registered nurses in a teaching hospital. *Journal of Clinical Nursing*, 22, 3141-3152. doi:10.1111/jocn.12260
- Sjögren, K., Lindkvist, M., Sandman, P. O., Zingmark, K., & Edvardsson, D. (2015). To what extent is the work environment of staff related to person-centered care? A cross-sectional study of residential aged care. *Journal of Clinical Nursing*, 24, 1310-1319. doi:10.1111/jocn.12734
- Skirbekk, H., & Nortvedt, P. (2014). Inadequate treatment for elderly patients: Professional norms and tight budgets could cause "Ageism" in hospitals. *Health Care Analysis*, 22, 192-201. doi:10.1007/s10728-012-0207-2
- Squires, J., Hoben, M., Linklater, S., Carleton, H., Graham, N., & Estabrooks, C. (2015). Job satisfaction among care aides in residential long-term care: A systematic review of contributing factors, both individual and organizational. *Nursing Research and Practice*, 2015, 1-24. doi:10.1155/2015/157924
- Ude, S. (2015). *Technological change and employee motivation in a telecom operations team* (Doctoral dissertation). Available from ProQuest Dissertations and Theses. (AAT 3706499).
- Woodhead, E. L., Northrop, L., & Edelstein, B. (2014). Stress, social support, and burnout among long-term care nursing staff. *Journal of Applied Gerontology*, 1-22. doi:10.1177/0733464814542465
- Zellmer-Bruhn, M., Caligiuri, P. & Thomas, D. (2016). Experimental design in international business research. *Journal of International Business Studies*, 47, 399-412. doi:10.1057/jibs.2016.12
- Zhang, N. J., Unruh, L., & Wan, T. T. (2013). Gaps in nurse staffing and nursing home resident needs. *Nursing Economics*, 31, 289-297. Retrieved from <http://www.nursingconomics.net>
- Zhang, Y., Punnett, L., & Gore, R. (2014). Relationships among employees' working conditions, mental health, and intention to leave in nursing homes. *Journal of Applied Gerontology*, 33, 6-23. doi:10.1177/0733464812443085