JOB EMBEDDEDNESS AND CERTIFIED NURSING ASSISTANT RETENTION IN

SKILLED NURSING FACILITIES

by

M. Ashley Pressman

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Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

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Liberty University, School of Business

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**Abstract**

Certified nursing assistants (CNA) are a critical part of the direct care provided in skilled nursing facilities (SNF). Turnover among CNAs results in patient care issues and increased costs to providers. Despite years of research into why CNAs leave their jobs, the turnover in this occupation continues to be the highest among direct caregivers in SNFs. Job Embeddedness (JE) is a construct that evaluates why people stay with their job. JE has been found to explain intent to leave and voluntary turnover over and above the traditional indicators of job satisfaction, organizational commitment, job alternatives, and job search. This quantitative, non-experimental correlational research study examined the relationship between JE and CNA retention. The analysis determined that there is a relationship between JE and CNA retention and was used to identify the elements of JE that are significant to CNA retention. The results may be beneficial to SNF leaders as they assess and modify their human resource management practices that are aimed at reducing turnover and increasing retention.

*Key words:* Certified Nursing Assistant, Turnover, Job Embeddedness, Skilled Nursing Facility

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**Dedication**

To my little ones, Elon, Elka, and Iris and our big sisters, Madalyn and Hannah. I hope

you always choose to work hard and to do more than what is expected of you.

**Acknowledgements**

Thank you to my family for being patient with me during this time. My children have kindly coordinated naps and quiet times to allow me to work. Their patience has been much appreciated. Also, thank you to my parents for always pushing me academically. Most of all, a big thank you to my sweet husband, Sean. He has supported me since the moment I got the wild idea to start this degree. Without his support and help, I could never have managed all the duties in my life. Now onto the next thing.

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**Section 1: Foundation of the Study**

The problem to be addressed in this study is that turnover for certified nursing assistants (CNA) in skilled nursing facilities (SNF) continues at high levels which reduces quality of care and increases expenses. Specifically, one for-profit SNF chain is facing unacceptable levels of turnover and leadership seeks to be better informed of why CNAs stay in their jobs. However, despite decades of research into why CNAs leave their jobs, research has not been conducted to determine why SNF CNAs voluntarily continue their employment. The job embeddedness (JE) construct has been found to be a reliable predictor of retention in many sectors, including the SNF industry. However, JE has not been explored for CNAs in SNFs. This study is a quantitative, non-experimental study designed to examine the correlation between the JE construct and CNA retention within SNFs. The general relationship was examined, as well as the impact of demographics on the relationship. The study also explored the relationship between the subcomponents within the JE construct and CNA retention. Research was conducted through a survey of CNAs employed by one SNF chain. The intention of this study is to provide SNF leaders with valuable information that will allow them to implement retention tactics that will increase the intention of CNAs to stay with their organization.

**Background of the Problem**

Turnover of CNAs in the SNF industry is a critical issue. Castle (2010) asserted that CNAs provide the majority of care for residents in SNFs in the United States. High CNA turnover rates are associated with lower health outcomes, reduced staffing levels, and replacement costs at as much as 25 percent of annual compensation (Kash, Castle, & Phillips, 2007; O'Malley, 2000; Trinkoff et al., 2013). In addition to high turnover rates, the demand for CNAs to care for the increasing aging population is anticipated to grow by 11 percent between

2016 and 2026, a rate that is faster than the average for all occupations (U.S. Bureau of Labor

Statistics, 2019).

Previous literature has examined the impact of multiple factors on turnover and retention

of CNAs in SNFs. These include organizational climate, communication, staff empowerment,

autonomy, personal factors, supervisor behavior, and benefits (Anderson, Corazzini, &

McDaniel, 2004; Berridge, Tyler, & Miller, 2018; Bishop, Squillace, Meagher, Anderson, &

Weiner, 2009; Choi & Johantgen, 2012; Decker, Harris-Kojetin, & Bercovitz, 2009; Weiner,

Squillace, Anderson & Khatutsky, 2009). However, although a significant amount of research

has been conducted related to JE in other fields and occupations, the relationship between JE and

retention of CNAs in the SNF industry has not been examined. JE is a construct that includes

elements of commitment to a job by evaluating an individual's links to others and perceptions of

job fit, as well as the sacrifices they would have to make if they left their jobs (Mitchell, Holtom,

Lee, Sablynski, & Erez, 2001). Evaluating the relationship between JE and retention for CNAs is

significant as previous research into JE for other health care workers has identified that JE can

impact retention. Fasbender, Van der Heijden, and Grimshaw (2018) found that the level of JE in

nurses buffered intentions to leave when job stress occurred. In addition, Reitz (2014b) found

that many areas of retention could be enhanced by focusing on the JE of nurses in the SNF

industry. These same principles could be applied to CNAs in SNFs so that industry leaders can

direct resources properly and reduce turnover.

**Problem Statement**

The general problem to be addressed is that turnover rates of CNAs in SNFs continue at

high levels that result in increased costs and overall care issues. In spite of decades of research

into turnover and retention of this occupation, CNA turnover rates range as high as 100 percent

and are higher than any other SNF occupation (American Health Care Association [AHCA], 2014; Barbera, 2014). Brady (2016) estimated the complete turnover cost per CNA is $30,000. In addition, high CNA turnover is linked to poor quality of care indicators, higher care deficiencies, and an inability to provide continuity of care (Dabney & Kalisch, 2015; Lerner, Johantgen, Trinkoff, Storr, & Han, 2014; Trinkoff et al., 2013). These care issues can result in adverse outcomes and financial survey penalties that have cost implications for SNFs, with fines averaging over $28,000 (Burke, Hess, Baron, Levy, & Donze, 2018; Rau, 2019). Previous research into this problem has focused on why CNAs leave their current positions. However, a more current option, the JE construct has been shown in other industries to explain turnover beyond traditional, antecedent-focused models by examining why individuals stay (Mitchell et al., 2001). In addition, Reitz (2014b) has found the JE construct to be a valid tool for nurse retention in SNFs.

The specific problem addressed is that one for-profit, SNF chain in the Mid-Atlantic is facing 90 percent turnover rates among their CNA caregivers and retention rates of only 50 percent (T. Putney, personal communication, August 27, 2019). The organization has identified that high turnover of this position results in replacement costs of up to $7,000 per CNA as well as lower quality of care as evidenced by an identified correlation between high turnover and lower customer service scores (T. Putney, personal communication, August 27, 2019; Putney, 2019). A quantitative, correlational research study was conducted to determine if there is a relationship between JE and CNA retention for this SNF chain. The intent was that SNF leaders will be able to properly direct their resources to focus on the specific areas of JE that are correlated with improved retention.

**Purpose Statement**

The purpose of this correlational, quantitative study is the evaluation of the relationship between JE and retention for CNAs in the SNF industry. The intent is to reduce high turnover rates that lead to lower quality of care and higher expense costs. This purpose was met through a study conducted within one multi-center, SNF chain. The chain has faced CNA turnover rates that have negatively impacted quality of care and caused unnecessary recruitment and onboarding expenses. The variables were measured using the JE instrument, a 40-item, six-factor tool that assesses why employees stay at their job (Mitchell et al., 2001). This instrument was administered to full-time CNAs at 42 centers. In addition, questions related to demographics and intent to stay were asked as numerous studies have previously linked JE and employee demographics (Aboul-Ela, 2018; Ghosh & Gurunanthan, 2015; Jiang, Liu, McKay, Lee, & Mitchell, 2012).

Findings were used to meet three objectives. First, the researcher sought to examine the relationship between JE and retention of CNAs. Second, the data were refined to determine if the relationship between JE and CNA retention is impacted by certain demographics. Finally, the relationship between CNA retention and the subcomponents of the JE construct were examined. Reitz and Anderson (2011) found that the JE instrument can assist with the assessment of employee-employer relationships so that organizational leadership can be informed of human resource (HR) practices that embed their employees and increase retention. The findings from this study can be used by the leadership within the SNF chain to determine ways to increase JE for the factors that are found to be related to retention. In addition, demographic findings will allow leadership to further refine their decisions as needed based on the demographics of CNAs within individual centers.

**Nature of the Study**

This quantitative research study utilized a non-experimental, correlational survey design to test the relationship between JE and CNA retention in SNFs. During the study, the researcher surveyed over 1200 CNAs at 42 facilities. The intention of this investigation was to determine the relationship between JE and CNA retention in the SNF industry, examine this relationship related to CNA demographics, and examine the relationship between CNA retention and the subcomponents of the JE instrument.

**Discussion of method.** The survey methods of quantitative, qualitative, and mixed methods were considered as this researcher was selecting a method for the study. The quantitative method was selected as it employs an objective statistical analysis of the data and is utilized when a researcher seeks to determine the relationship among variables which can be measured and analyzed using statistical procedures (Martin & Bridgmon, 2012). The quantitative method allowed this researcher to study the variables of JE and CNA retention. Comparatively, the qualitative method is beneficial when a researcher wishes to address research problems related to the meaning that groups or individuals give to a problem (Creswell & Poth, 2018). This study utilized the JE instrument, a tool that was developed utilizing work and non-work factors that provide a model that explains retention (Mitchell et al., 2001). The use of the JE instrument led to the selection of quantitative research as it provides an objective analysis of participant data.

In addition, strengths of quantitative research include comparison, independence of the observer, and an objective analysis (Amaratunga, Baldry, Sarshar, & Newton, 2002). Stake (2010) asserted that, in contrast to qualitative research, there is little interpretation required during quantitative research. For this study, the quantitative method was chosen in order to

ensure that data would be collected and analyzed in an objective manner. This researcher is a

Nursing Home Administrator (NHA) within the organization being surveyed and wished to

mitigate the risk of researcher bias. In addition, this study measured the behavior and

characteristics of a large, representative sample of the CNAs working in SNFs. Hyde (2000)

explained that quantitative research allows the ability to examine a large sample to quantify and

generalize the behavior of a population as a whole as opposed to qualitative research which

focuses on a small representative sample.

Finally, mixed method research was not selected. Mengshoel (2012) explained that mixed

method research triangulates quantitative and qualitative data to address a central research

question. Mixed method research utilizes both quantitative and qualitative research designs to

examine the same content within a study (Stake, 2010). However, Creswell (2014) stated that

mixed method research is utilized when neither quantitative nor qualitative designs can be

utilized on their own to understand a research problem. This researcher determined that the

quantitative method was able to properly answer the research problem in this study.

**Discussion of design.** A correlational study is a non-experimental design that is utilized

when a researcher seeks to describe and measure the relationship between two or more variables

(Creswell, 2012). The central research question for this study examines the relationship between

JE and CNA retention in the SNF industry. According to Creswell (2002), the use of

correlational design allows the researcher to establish patterns between two variables. The ability

to establish patterns between JE and CNA retention allowed the researcher to meet the study's

purpose.

Both a descriptive and an experimental design were evaluated and discarded for use in

this study. Williams (2007) provided an explanation of descriptive and experimental designs.

Descriptive design observes and describes a phenomenon in its current state. During experimental research, a researcher measures the outcome of a treatment following an intervention provided to the test group. However, the correlational design was chosen by this researcher as it allowed for the estimation of relationships between two or more variables without interference (Becker et al., 2015).

**Summary of the nature of the study.** A quantitative, correlational, non-experimental study was chosen for this research. The selected method allowed the researcher to objectively analyze the data and examine the relationship between JE and CNA retention. In addition, this method allowed the researcher to apply the research to a large sample. Other methods and designs were considered and discarded as the chosen nature of the study was best suited for answering the research questions.

**Research Questions**

The central research question is:

o   Is there a relationship between JE and CNA retention in the SNF industry?

In addition, demographic data (i.e., gender, age, years as a CNA) were collected and analyzed:

o   Is there a relationship between JE and CNA retention in the SNF industry for specific demographics?

Finally, the instrument was used to determine the relationship between CNA retention and the JE subcomponents within the 40-item, six-subcomponent instrument:

o   Is there a relationship between the subcomponents within JE and CNA retention in the SNF industry?

**Hypotheses**

The first hypothesis corresponds to the central research question and examined if there is a statistically significant relationship between JE and CNA retention in SNFs. The corresponding null ($H_{01}$) and alternative ($H_{A1}$) hypotheses are:

$H_{01}$: There is not a statistically significant relationship between JE and CNA retention in one for-profit SNF chain.

$H_{A1}$: There is a statistically significant relationship between JE and CNA retention in one for-profit SNF chain.

The second hypothesis corresponds to the research question that examines the statistically significant relationship between JE and CNA retention for demographic factors of gender, age, and years in the profession. The corresponding null ($H_{02}$) and alternative ($H_{A2}$) hypotheses are:

$H_{02}$: There is not a statistically significant relationship between JE and CNA retention in one for-profit SNF chain for certain demographics.

$H_{A2}$: There is a statistically significant relationship between JE and CNA retention in one for-profit SNF chain for certain demographics.

The final hypothesis corresponds to the research question that examines the statistically significant relationship between JE and CNA retention for the JE instrument subcomponents. The corresponding null ($H_{03}$) and alternative ($H_{A3}$) hypotheses are:

$H_{03}$: There is not a statistically significant relationship between JE and CNA retention in one for-profit SNF chain for the subcomponents of the JE instrument.

$H_{A3}$: There is a statistically significant relationship between JE and CNA retention in one for-profit SNF chain for the subcomponents of the JE instrument.

**Theoretical Framework**

The theoretical framework for this study is based upon the concepts that were used to establish the JE construct and areas of the literature surrounding retention of CNAs. The research for this correlational, quantitative study examined the relationship between JE and CNA retention in the SNF industry. The independent variable of JE was defined as a measurement established through CNA completion of the JE instrument. The dependent variable of retention was defined as the self-reported intention of staff members to remain employed with their current organization.

**Job embeddedness.** The construct of JE was designed to build upon traditional approaches of evaluating retention of workers in order to establish a more complete model. Traditionally, retention of employees is explained by job satisfaction and organizational commitment. There are many theories used to explain job satisfaction. The Theory of Work Adjustment established by Weiss, Dawis, England, and Lofquist (1968) focuses on the theme that individuals bring skills to their work environment in exchange for rewards. Under this theory, individuals remain in their jobs if these rewards are being met. Similarly, the *met expectations theory* is commonly used to explain job satisfaction as this theory holds that individuals have requirements that they wish to fulfill through their work (Best & Thurston, 2004). However, when these requirements go unfulfilled, dissatisfaction with work occurs (Irving & Montes, 2009). Still, job satisfaction cannot fully explain turnover since even with high job satisfaction, the risk of position turnover remains.

Organizational commitment is another traditional approach to evaluating retention of workers. This approach has been influenced by the attitudes of workers and how they perceive justice (Aquino, Griffeth, Allen, & Hom, 1997). Meyer and Allen (1991) determined that

organizational commitment reflects an individual's emotional attachment to their employer in the

Three Component Model of Organizational Commitment. Under this model, an employee

chooses to stay committed to their organization through the evaluation of a cost benefit analysis

of the economic and social implications of changing organizations.

Although job satisfaction and organizational commitment theories partially explain

retention, they do not provide complete models. Griffeth, Hom, and Gaertner (2000) found that

traditional turnover models that are focused on on-the-job factors and perceived opportunities are

only able to explain about 10 percent of retention variance. For this reason, the JE construct was

developed. Although traditional models focus on why individuals leave their work, Mitchell et

al. (2001) chose to focus the development of the JE construct on why people stay in their

job. The researchers incorporated the motivational concepts of March and Simon (1958) to

explain performance decisions at work. These motivational concepts include goals, expectance,

and social control. In addition, JE incorporated the general withdrawal construct that was

formulated by Hanisch and Hulin (1991). This construct focuses on withdrawal through both

performance and participation. JE acknowledges that individuals must make the decision to

perform prior to making the decision to participate. A particularly unique concept considered by

the JE model is that off-the-job factors are also critical antecedents to turnover. Mitchell et al.

(2001) were able to divide both on-the-job embeddedness and off-the-job embeddedness into the

categories of fit, links, and sacrifice to provide a more complete construct to explain why

individuals stay with their organization.

**CNA retention.** Many theories have been explored and built upon to explain retention

among CNAs in SNFs, and some have focused on leadership. Sheridan, White, and Fairchild

(1992) provided the theory that CNA retention is related to two categories of administrative

climate: reward and *laissez-faire*. Under a reward climate, goals are clear and rewards are merit based. However, under a *laissez-faire* climate, there is a disorganization of management that leads to status-based rewards. Similarly, the theory of intrinsic satisfaction reflects the belief that extrinsic factors, including managerial practices and rewards, influence the intrinsic satisfaction held by an employee (Deci, Koestner, & Ryan, 1999). Decker et al. (2009) found that intrinsic satisfaction of CNAs was strongly associated with a positive assessment of their supervisor's behavior and their pay. Further, Herzberg's Theory of Motivation and Hygiene also speaks to job satisfaction and has been associated with CNA retention (Brady, 2016). Under this theory, SNF leadership can impact dissatisfaction through a focus on motivation factors, or added responsibility, growth, and advancement opportunities, as well as hygiene factors, or anything that contributes to dissatisfaction.

Additionally, occupation-based and organizational related factors have been considered. Rosemarie Rizzo Parse's Theory of Human Becoming (1981) has been used to explain CNA job satisfaction through meaning, rhythmicity, and transcendence (Parse, 2003). This theory is focused on the idea that those in the nursing profession are seeking to improve quality of life through their knowledge and lived experiences. The Circular Model of Turnover was specifically developed to predict turnover in long-term care (LTC) settings like SNFs (Cohen-Mansfield, 1997). This model considers work-related factors, or organizational characteristics and aspects of resident care, as well as personal factors that impact individual employees.

Contingency factors related to CNA job satisfaction and intent to stay have also been examined by researchers. Dill, Morgan, and Marshall (2012) considered how personal and job circumstances were influenced by the limited financial resources of CNAs. Their findings showed that job satisfaction was not a significant predictor of retention, but that tenure, previous

experience, and earnings provided a better prediction of retention outcomes. The focus of

contingency factors and many of the theories surrounding CNA retention has been on on-the-job

factors. However, JE offers the opportunity to expand this focus to include off-the-job factors as

well.

**Framework.** Figure 1 was developed to illustrate the relationship between the variables

that were examined in this study. The independent variable is JE and the dependent variable is

CNA retention. The primary goal of this correlational study was to examine the relationship

between these two variables to determine if there is a relationship between JE and CNA retention

(Creswell, 2012). Moderating variables included demographic variables of gender, age and years

as a CNA. As seen in Figure 1, during this study, the impact of these moderating variables on the

relationship between the independent and dependent variable were examined. Finally, the

relationship between CNA retention and the subcomponents of the JE instrument were

investigated to see which elements of the construct provide the best fit to CNA retention.



*Figure 1*. Conceptual framework displaying variable relationship.

**Summary of the conceptual framework.** The theoretical framework for this study utilized the concepts that were used in the formation of the JE construct and the factors that have been found to impact CNA retention through previous research. The JE construct was founded on theories that surround job satisfaction, organizational commitment, and motivational concepts. CNA retention has been examined considering work related and contingency factors. The framework for this study examined the relationship between the independent variable, JE, and the dependent variable, CNA intent to stay, and considers the moderating variables of CNA demographics.

**Definition of Terms**

The following terms are defined below according to use in this research:

*Certified nursing assistant* - Certified nursing assistants have earned a certification through a technical program and provide direct care to residents within skilled nursing facilities. This direct care includes activities of daily living: bathing, dressing, grooming, feeding, and mobility (U.S. Department of Health and Human Services, 2011). The population of CNAs considered in this study are full-time employees of the SNF chain that is serving as the research site.

*Fit* - Fit is a subcomponent of JE and provides a measurement of overall compatibility. For on-the-job embeddedness, this is a measure of compatibility with the job. For off-the-job embeddedness, this is a measure of compatibility with the community or surrounding environment (Kiazad, Holtom, Hom, & Newman, 2015).

*Job embeddedness* - Job embeddedness is a construct that was developed to determine why people stay with their jobs. This consists of an analysis of on-the-job and off-the-job embeddedness related to links, fit, and sacrifice (Mitchell et al., 2001).

*Links* - Links is a subcomponent of JE and explains the formal and informal connections that exist between a person and an organization or other people (Mitchell et al., 2001).

*Off-the-job embeddedness* - Off-the-job embeddedness, or community embeddedness, is the dimension of JE that is related to an individual's connectedness to people and activities within the communities in which they live (Mitchell et al., 2001). Off-the-job embeddedness is comprised of the subcomponents of links, sacrifice, and fit within the community.

*On-the-job embeddedness* - On-the-job embeddedness, or organization embeddedness, is the dimension of JE related to an individual's connectedness to people and activities within their jobs (Mitchell et al., 2001). On-the-job embeddedness is comprised of the subcomponents of links, sacrifice, and fit within the organization.

*Retention* - Retention is a measure of staff stability and is defined as the intent to stay with the organization (American Health Care Association [ACHA], 2014).

*Sacrifice* - Sacrifice is a subcomponent of JE that describes the cost that is believed to exist related to material or psychological benefits that could be lost when leaving a job (Mitchell et al., 2001).

*Skilled nursing facility (SNF)* - Skilled nursing facilities provide licensed nursing and therapy services in an inpatient setting. The services provided allow for observation, management, evaluation, and treatment of medical care (Medicare.gov, n.d.).

**Assumptions, Limitations, Delimitations**

The following section describes the assumptions, limitations, and delimitations that apply to this study. The assumptions provided are facts that are considered true but are not verified in

the study. The limitations are potential weaknesses related to this study. And finally, the

delimitations describe the scope of the study.

   **Assumptions.** The central assumption of this study is that the JE instrument can be

applied to retention of CNAs in SNFs and that an identifiable relationship exists. Current

research supports this assumption as Ghosh and Gurunanthan (2015) have identified several

studies that apply the JE instrument to retention within various fields. In addition, Reitz (2014b)

found that the JE construct is applicable to registered nurse (RN) retention in SNFs. It is also

assumed that the population of CNAs surveyed for this study were willing participants,

understood the questions being asked, and provided honest answers to the survey. Another

assumption is that the sample size was adequate to meet the needs of this survey without

resulting in a testing error and that all statistical testing was accurate and appropriately

conducted. Finally, it is assumed that the development and setup of this survey limited any

potential researcher bias.

   **Limitations.** Brutus, Aguinis, and Wassmer (2013) recommended that researchers self-

report limitations that might impact validity. There are several identifiable limitations related to

this study. First, the participants are all employees of the organization for which this researcher

works. As a result, willingness to provide honest responses, particularly surrounding intent to

remain employed, is one factor. In order to avoid this limitation, and achieve honest and accurate

responses, participants must believe that their responses are confidential. Also, to assure that the

questionnaire is understood, and accurate results are obtained, it is important that it was

administered correctly and properly defined. Another limitation related to the research site was

that all the CNAs being studied are employed by one for-profit, chain organization. Other

organizations, particularly those that are not chains or have a different profit status, might believe

that the findings do not provide a relevant application to their facility. Finally, although there are

a large number of CNAs employed by the for-profit SNF chain, the facilities are located in the

Mid-Atlantic region. The limited geography of this study might lead to results that cannot be

applied to the larger geographic population. Finally, the non-compulsory nature of subject

participation restricted findings to the data provided only by those who are interested in this

study and willing to participate.

There were also limitations related to the study design. First, a cross-sectional survey was

employed, so only current intent to remain employed could be measured. Conversely, a

longitudinal study would capture actual retention information that cannot be collected in this

study. Also, the correlational design allows for the measurement of the strength of association

between variables; however, it does not provide proof of a causal relationship (Creswell & Poth,

2018).

**Delimitations.** The boundaries of this research study were limited to studying JE and

CNA retention in SNFs. The study was designed to focus on the relationship of JE, as measured

with the JE instrument, to SNF CNA retention, as measured by intent to stay with the

organization (Mitchell et al., 2001). The results of this study can be applied to CNAs employed

by SNFs. Due to access of participants, the research sample was limited to CNAs who work for

the same for-profit SNF chain. This might limit the generalizability of the results; however, the

population provided a sample size that was sufficient for correlational research analysis. Finally,

it is possible that the population was unwilling to participate or that the participants did not

respond accurately due to concerns that their responses could negatively impact their

employment.

**Significance of the Study**

This study aimed to address the problem of high turnover rates of CNAs in SNFs that result in adverse health outcomes, care deficiency fines, and CNA replacement costs (Burke et al., 2018; O'Malley, 2000; Trinkoff et al., 2013). The study evaluated the effectiveness of a relatively new tool, the JE construct, on identifying why CNAs stay in their jobs. The intention was that the results of this research will allow SNF leaders to improve retention and enhance how their staff achieves God's purpose for work on earth. The research is significant to the health care management cognate as CNAs are the primary source of care for residents in SNFs and improved retention of this critical position is linked to improved quality of care.

**Reduction of gaps.** Much of the literature related to CNA retention in the SNF industry has been limited to motivation, organizational factors, and job satisfaction. In spite of this research, turnover rates among CNAs have continued to increase and continue to result in high costs and quality-of-care issues for the SNF industry. Even though the JE construct was initially developed through the examination of hospital workers, there is a gap in the literature related to its application to retention of CNAs in the SNF industry. However, JE has proven to be a useful predictor in a large range of employment locations, including grocery stores, athletic departments, banks, and hospitals (Cunningham, Fink, & Sagas, 2005; Holtom & O'Neill, 2004; Karatepe & Avci, 2019; Mallol, Holtom, & Lee, 2007). Through this research, links between JE and turnover indicators have been established. A survey of bank employees found that JE predicted turnover and could provide employers with information that was useful in the development of retention practices (Mallol et al., 2007). In addition, studies have been conducted with large populations to support the application of JE across multiple occupations. A study of over 10,000 individuals in various industries showed that JE improved the prediction of turnover

beyond what could be established through demographics, ease of movement, and withdrawal

behaviors (Tanova & Holtom, 2008).

Like other industries, research has shown many implications related to JE for nurses in

acute care settings. Holtom and O'Neill (2004) found that JE provided a better prediction of

nurse turnover at a community-based hospital than other indicators like job satisfaction,

organizational commitment, and job alternative options. In addition, hospital research has shown

demographic considerations, areas where JE mitigates turnover risk, and aspects of organizations

that increase JE. Reitz, Anderson, and Hill (2010) found that there was a significant relationship

between age and JE as older nurses are more likely to have higher JE. Fasbender, Van der

Heijden, and Grimshaw (2018) determined that high JE buffered the relationship between job

stress and turnover. Research of staff nurses at two public hospitals identified higher JE existed

when nurses felt supported by their supervisors (Karatepe & Avci, 2019).

Despite implications identified in acute care and other industries, there has been limited

JE research conducted in the SNF industry and there is a gap in the research related to CNA

retention in this area. Reitz (2014b) examined the relationship between the JE construct and RN

retention in SNFs. Through this research, Reitz developed a JE model that supported RN

retention and could be used by SNF leaders to develop retention practices. Among his

recommendations, Reitz suggested that the SNF industry could benefit from the examination of

JE related to other direct care workers, including CNAs.

**Implications for biblical integration.** God built humans to work, and fulfilling this

purpose is just as important to humans as meeting any other physical need (Keller & Alsdorf,

2012). God wishes for every individual to fulfill this purpose through the redemption of

humankind as he or she uses his or her individual talents to provide goods and services to the

community (Van Duzer, 2010). In Job 29:15 (English Standard Version[ESV]), Job says, "I was

eyes to the blind and feet to the lame." CNAs employed by SNFs have been given the unique

opportunity to fulfill the same calling as Job and fill in the gaps where needs exist for the most

vulnerable population, our disabled and elderly. A Christian SNF employer has an obligation to

create a positive work environment so that his or her staff can do justice to their vocation and see

the rewards that their work brings to others (Hardy, 1990).

SNF employers must ensure that their CNAs are fulfilled in their work. Even in paradise,

Adam and Eve were called by God to work (Van Duzer, 2010). "And God said, 'Behold, I have

given you every plant yielding seed that is on the face of the earth, and every tree with seed in its

fruit'" (Genesis 1:29, ESV). Just as God provided Adam and Eve with the seeds and seed-

bearing fruit that were needed to nourish their bodies, it is important for SNF leaders to seek out

ways to provide their staff with the resources needed to meet the demands of their calling.

Through the examination of the relationship between JE and CNA retention, it is possible to

identify the proper areas to focus recruitment and retention practices to ensure that CNA staff are

given the opportunity to be fulfilled in their work. This focus and investment in employees not

only allows leaders to meet organizational goals, but it also makes employees feel valued,

secure, and embedded in their role. This serves God's purpose as Job 24:23 (ESV) tells us of

God's actions toward His followers, "He gives them security, and they are supported, and His

eyes are upon their ways."

**Relationship to field of study.** The issues of turnover and staff retention are an

important focus for health care managers, particularly in the growing field of LTC. Medical

advancements and an aging population have increased the need for LTC services. Of those

needing LTC, 23.8 percent are served by the 15,600 SNFs in the United States (National Center

for Health Statistics, 2019). These SNFs have the capacity to serve 1.6 million individuals. The

bulk of the care for this large population is provided by CNAs who are estimated to provide 80 to

90 percent of direct care (Castle, 2010). Turnover of this critical position has been linked to

reduced quality of care and adverse health care outcomes (Trinkoff et al., 2013). In spite of

decades of research into turnover and retention of CNAs, turnover statistics continue to increase,

and, at 51.5 percent, CNA turnover is higher than any other SNF occupation (AHCA, 2014).

**Summary of the significance of the study.** Given the focus on fit, links, and sacrifice

among organizational and community-based factors, JE lends itself to the health care industry.

Health care leaders would be well served to consider how policies related to patient satisfaction

and quality of care could further increase the JE of their staff (Reitz, 2014a). Examining the

relationship between JE and CNA retention allows health care managers in the SNF industry to

improve recruitment and retention programs to impact CNA retention in their centers. In

addition, it allows SNF leaders to provide their CNA employees with the job stability that will

allow them to develop greater relationships with residents and feel more fulfilled in their careers.

## A Review of the Professional and Academic Literature

The purpose of the quantitative, correlational study is the examination of the relationship

between retention of CNAs in SNFs and the construct of JE. The literature review begins with a

focus on the problem to be addressed by the study. The discussion opens with the general

problem and implications of health care turnover and then focuses on turnover of CNAs in SNFs.

Traditional models used to explain and address this turnover are then briefly discussed.

However, these models have not been proven to have an ideal application to turnover and

retention of CNAs, and the purpose of this study is to apply the JE construct to this problem. For

this reason, the next part of this literature review introduced the theoretical framework for the

study, the JE construct. The foundation and a background of JE was provided before introducing findings related to JE. These findings include how JE compares to traditional analysis methods, implications of JE, JE related to demographics, and how JE has been examined in various industries, including health care. The review related to health care begins first in the acute care setting where the bulk of the JE research in this industry has been conducted. From there, research related to JE for SNF nurses is discussed and then applied to CNA retention based on findings from CNA research that correlates with areas of the JE construct. The literature review ends with retention strategies that have been established through JE and thoughts on how these strategies might apply to CNAs based on other research.

The literature review contains the following 13 sections: (a) a literature review key search; (b) an overview of the general problem; (c) an overview of the specific problem; (d) a discussion of transitional turnover and recruitment measurements; (e) a discussion of the development of the JE construct; (f) a comparison of JE to transitional analysis methods; (g) a discussion of JE implications; (h) a discussion of JE related to demographics; (i) a discussion of JE in practice; (j) the application of JE and retention in the health care industry; (k) a discussion of retention strategies developed through JE; (l) a discussion of implications for JE related to CNA retention; and (m) a summary of the literature review.

**Literature review key search**. The literature review contained key word searches, including a combination *of certified nursing assistants, turnover, retention*, and *job embeddedness*. The resource libraries for the search included ProQuest, EBSCOhost, MedLine, Ovid, Oxford University Press, and the National Center for Biotechnology Information. The literature review contained 132 relevant references.

**The general problem - turnover and retention in health care.** An aging population,

combined with a limited workforce that cannot keep up with demand, has resulted in health care

shortages that are a worldwide concern (Duffield, Roche, Homer, Buchan, & Dimitrelis, 2014;

Johnson, 2018; Wan, Li, Zhou, & Shang, 2018). The aging baby boomer generation is impacting

the industry two-fold with both a growing number of individuals in need of health care services

and an increasing number of retiring health care workers. In addition, turnover rates for direct

care workers in the acute care industry are at the highest levels experienced in over a decade

(Nursing Solutions Inc., 2019). As a result, the U.S. Bureau of Labor Statistics (2019) found that

employment needs for nurses is growing faster than any other occupation with a projected need

of an additional 1.1 million nurses. Similarly, the U.S. Bureau of Labor Statistics (2019)

estimates that the overall health care demand for CNAs will grow by 11 percent by 2026. As a

result of economic conditions, many health care workers have delayed their retirement.

However, these workers have been able to retire as the nation's economy has recently improved

causing a depletion of older nurses and direct care staff. The result is fewer direct care nurses and

nurse educators needed to provide instruction to allow nursing schools to meet capacity (Fang &

Kesten, 2017). Even as school administrators are able to find the additional educators needed to

train new nurses, the resulting influx of nurses will not meet demand for the foreseeable future.

**Turnover and retention in skilled nursing facilities (SNF).** Retaining direct care staff

has become an increased focus within the SNF industry. As a result of an aging population, the

need for additional LTC services in the United States has grown. Spetz, Trupin, Bates and

Coffman (2015) anticipate that 17 percent of those between the ages of 65 and 74 will need LTC

services, the majority of which are provided in the SNF setting. Turnover rates among direct

caregivers in SNFs is high. Average SNF rates for RNs, LPNs, and CNAs range from 55 to 75

percent. CNA turnover has the greatest impact on these averages with rates as high as 100

percent (Barbera, 2014). However, overall turnover rates have been difficult to determine as

organizations define and measure turnover differently (Kovner, Brewer, Fatehi, & Jun, 2014).

As staffing demands grow in health care, there is competition among provider types to

recruit staff. SNFs that provide care for the elderly and disabled can often be seen as less

prestigious by direct care applicants (Gautun & Grodem, 2015). Compared to acute care

facilities, nursing homes have fewer nurses and less on-site physician support which leaves the

bulk of the care to minimally trained CNAs (Gautun & Syse, 2017). The result is often subpar,

low staffing numbers that further exacerbate turnover and openings within SNFs as burnout from

staffing levels occur. Currently, the required staff levels remain subjective within the industry as

there are no national minimum nurse staffing levels for SNFs. However, the need for minimum

levels is being carefully analyzed by the Centers for Medicare and Medicaid (CMS) and the

actual hours worked within facilities is provided to consumers for comparison (Turner, 2015).

**Implications of health care turnover.** Given the high demand for staff, turnover is a

serious concern for health care managers and has multiple implications. Higher turnover has

been shown to impact care and costs through decreased staff levels, excessive work hours,

medical errors, and a reduction in an organization's ability to provide adequate continuity of care

(Dabney & Kalisch, 2015). Twigg, Gelder, and Myers (2015) found that hospitals that were

below desired staffing levels experienced greater risk of surgical wound infections, urinary tract

infections, pressure ulcers, pneumonia, and sepsis. These adverse outcomes are publicly reported

and can damage a facility's reputation. In addition, under the Hospital Readmission Reduction

program, acute care centers that report high readmission rates are penalized by as much as three

percent of incoming Medicare revenues (McIlvennan, Eapen, & Allen, 2015).

In addition to financial penalties from adverse patient outcomes, health care facilities with high turnover are also impacted financially. Turnover can result in staffing levels that can impact an organization's ability to meet community demands. In many health care settings, staffing ratios can result in lost revenue as the facility must divert to other providers to limit the number of patients that are admitted and treated. The revenue lost from patient diversion as well as additional expenses in recruitment and onboarding costs is significant. In acute care settings, the turnover of bedside nurses was estimated to account for a financial loss of $52,100 per RN (Nursing Solutions Inc., 2019). In addition, Brady (2016) estimated that the cost to recruit, onboard, and train a CNA is $30,000 per position.

**The specific problem - CNA turnover and retention in SNFs.** CNA turnover is the highest among direct care staff workers in SNFs (Barbera, 2014). Although SNFs also employ RNs and LPNs, CNAs are critical to the SNF industry as they provide 80 percent of the care for residents in these facilities (Gray et al., 2016). In addition, CNAs make up over 60 percent of the heath care workforce in SNFs (Brady, 2016). This critical position provides activities of daily living for residents which includes toileting, bathing, feeding, dressing, transferring, and ambulating (Kelley et al., 2016).

**Implications of CNA turnover in SNFs.** SNF leaders are faced with both financial and care implications related to CNA turnover. The cost of recruiting new CNAs is a significant factor (Brady, 2016). In addition, high CNA turnover is linked to lower quality of care and poor quality indicators, including a greater number of survey deficiencies, increased physical restraint and catheter use, more pressure ulcers, and poor pain management (Lerner et al., 2014). Similarly, Trinkoff et al. (2013) found that facilities with high turnover had higher odds of adverse patient outcomes including pain, urinary tract infections, and, most notably, twice the

odds of pressure ulcer development. Similar to the acute care setting, SNFs are also subjected to

fines from the federal and state governments when adverse outcomes occur. Facilities can be

fined for high survey deficiencies and penalized by up to two percent of Medicare

reimbursement for hospital readmissions of all Medicare admissions (Castellucci, 2018; Rau,

2019). In fact, in 2017, 73 percent of SNFs received some form of readmission penalty

(Castellucci, 2018).

Turnover further exacerbates dissatisfaction among CNAs as high turnover reduces

staffing levels and increases the care burden on staff (Castle, Engberg, Anderson, & Men, 2007).

Not only does job satisfaction have implications for turnover and retention, but all three of these

factors also impact the quality of care provided by staff (Dellefield, Castle, McGilton, &

Spilsbury, 2015; Sjorgren, Lindkvist, Sandman, Zingmark, & Edvardsson, 2015). One

explanation for this might be the impact that high turnover has on the amount of time that staff

has available to complete training. As turnover occurs, the resulting CNA ratios prevent staff

from being able to leave their assignments to receive training that can improve care quality

(Castle et al., 2007; Trinkoff et al., 2013). In addition, not all desire or intent to leave results in

turnover. Many low-wage earners like CNAs are unable to act on their desire to leave because of

the lack of resources available to allow them to switch jobs. The result is the potential for

unhappy workers that feel stuck in their current role and do not perform to their fullest potential.

**Traditional turnover and retention measurements.** Establishing an understanding of

why turnover occurs in an industry is critical to finding ways to impact and reduce turnover

(Ongori, 2007). There are several traditional measurements that have been applied to turnover

and retention in many industries, including CNAs in SNFs. However, these turnover

measurements have not provided a complete explanation for turnover of CNAs. Notably, job

satisfaction and organizational commitment, met expectations theory, and turnover contagion are discussed below.

**Job satisfaction and organizational commitment.** One of the original explanations for turnover was provided by March and Simon (1958) who theorized that two factors, job satisfaction and organizational commitment, were the primary forces behind employee turnover. The constructs of job satisfaction and organizational commitment are not only one of the original explanations, but these also provide the most frequently tested attitudinal constructs related to turnover and retention (Mohapartra & Shrama, 2010). For CNAs, organizational commitment can be developed through their attachment to their residents and can be fostered by an organization that focuses on patient care (Gray et al., 2016).

**Met expectations theory.** This theory suggests that individuals have certain expectations for their job, which if not met, result in dissatisfaction with work. These variances can be explained by expectations established at the start of a job and how these expectations vary from experience related to different job dimensions during the course of employment (Valle, Ruz, & Varas, 2015). As these expectations are not met, satisfaction with a job decreases. Meyer, Raffle, and Ware (2014) determined that this was a concern for newly trained CNAs as many found the position to be too much work for the pay and left the occupation to pursue a different position with similar pay and fewer benefits.

**Turnover contagion.** The job search and behavior of coworkers can also impact an employee's intention to leave or remain with an organization. Burnout and attitudes can spread among employees. Research theorizes that this sort of contagion is spread due to the tendency of individuals to absorb the negative and positive emotions of their coworkers (Petitta, Jiang, & Hartel, 2016). SNFs provide care around the clock to their residents. CNAs that work during off-

shifts can have little interaction with their supervisors and spend the bulk of their time with their coworkers making these individuals highly influential in their decision making.

**Traditional CNA turnover and retention measurements in SNFs.** A significant amount of the research related to turnover and retention of CNAs surrounds job satisfaction. To support the use of job satisfaction measures for turnover among CNAs in SNFs, Castle et al. (2007) utilized a longitudinal study to examine the relationship between job satisfaction, intent to leave, and actual turnover after one year. The findings showed that high job satisfaction resulted in lower scores related to intent to leave and turnover. However, Dill et al. (2012) found that job satisfaction and employment intentions were not significant predictors of retention among CNAs. These conflicting results might be explained by a CNAs dedication to their occupation, regardless of their current employment location. Gray et al. (2016) explored job satisfaction for CNAs through a qualitative study and discovered the importance that CNAs held for their part in the care of residents. The emerging themes related to work environment within this study were that the work being done was special, that CNAs are relationship builders, that CNAs are experts, and that CNAs are part of a team.

Despite being frequently used, traditional explanations for turnover have not been successful in explaining the reasons that CNAs stay in their job within the SNF industry. Leaders in other industries also have found that the traditional explanations for turnover do not fully explain rates. As a result, a more recent construct, the JE construct, was developed. However, this relatively new construct has not yet been examined in the context of CNA retention in SNF facilities.

**Development of the JE construct.** In 1995, colleagues Mitchell, Holtom, Lee, Sablynski, and Erez set out to find a better explanation for turnover. The group was aware that

many theories behind employee turnover focused on affect constructs that explain why people

leave their job. However, the group of researchers felt that these theories lacked an explanation

for why people stay in their job. They theorized that one was not simply the inverse of the other.

From their perspective, most people are satisfied with their job, do not job search before leaving,

and leave following some precipitating event or shock (Mitchell, Holtom, Lee, Sablynski, &

Erez, 2001). Building on their own experiences, they sought to learn more about the field,

environmental, or contextual influences that impact an individual's decision to stay (Lee, Burch,

& Mitchell, 2014). An overview of this construct is provided below with a review of its purpose,

foundation, components, and dimensions.

   **Purpose.** Mitchell et al. (2001) determined that there was a need to develop a new model

because other models, like job satisfaction and organizational commitment, only explain a small

percentage of turnover. As a result, Mitchell et al. (2001) set out to create a construct that

captured the integrated forces that keep an employee stuck within their organization. The

researchers determined that a retention-based strategy was fundamental in their approach as they

believed that why people stay is not the same as why they leave (Mitchell et al., 2001). The

result was a causal indicator model of an employee's "stuckness" within an organization. This

model, the JE construct was able to explain intent to leave and voluntary turnover over and

above the traditional indicators of job satisfaction, organizational commitment, job alternatives,

and job search (Mitchell et al., 2001).

   **Foundation.** Subsequent research has attributed JE to conservation of resources theory

(COR). Under COR, an individual is motivated to acquire and protect their resources. Kiazad et

al. (2015) theorized that this motivation is what causes employees to become embedded and to

behave as they do once they are. Further, as they seek to retain these resources, embedded

employees are motivated to invest the time and effort necessary to maintain them (Halbesleben,

Neveu, Paustian-Underdahl, & Westman, 2014). Ng and Feldman (2014) also examined COR

theory and JE and determined that these two theories explain the mediating effect of

organizational embeddedness on job motivation, networking behavior, and organizational

identification. However, COR theory also shows that the surpluses and losses experienced by an

employee will change over time as they acquire new job skills and form deeper relationships

with coworkers (Fasbender et al., 2018). As surpluses and losses occur, the researchers advise

that an employee's level of embeddedness will also change.

Table 1

*Attributes of Job Embeddedness*

|           | On-the-Job            | Off-the-Job         |
|-----------|-----------------------|---------------------|
| Fit       | Fit-Organization      | Fit-Community       |
| Links     | Links-Organization    | Links-Community     |
| Sacrifice | Sacrifice-Organization| Sacrifice-Community |

**Two dimensions.** There are two dimensions of JE: on-the-job embeddedness and off-the-

job embeddedness as noted in Table 1 above (Mitchell et al., 2001). For the most part,

researchers have treated these two dimensions similarly and combine them when considering

overall JE. However, these dimensions have also been examined separately to allow researchers

to identify how the two dimensions individually impact JE.

On-the-job embeddedness considers the organizational factors that cause employees to

stay in their jobs. These factors include organizational and supervisor support, compensation and

benefits programs, training and growth opportunities, coworker relationships, and clearly defined

roles (Kiazad et al., 2015). Off-the-job embeddedness is explained by the community-based factors, or factors outside of the workplace, that keep an individual at their job. These are the physical surroundings of an individual including school systems, public transportation, and professional and personal support systems.

Having community ties to organizations, churches, and non-work friends allows work to play a less central role in an employee's life. Although this concept might sound negative, having strong off-the-job embeddedness can help an individual to better manage and cope with work stress (Fasbender et al., 2018). In addition, an employee's off-the-job embeddedness is not limited to their own community involvement. Factors within an employee's family, like teenagers in school, a spouse that owns a local business, or a spouse with a local career, can embed an employee in a community as they seek to avoid disrupting their family (Feldman, Ng, & Vogel, 2012).

*Differing results of the two dimensions.* Research has shown that on-the-job embeddedness can have differing impacts on overall JE than off-the-job embeddedness. Lee, Mitchell, Sablynski, Burton, and Holtom (2004) sought to expand upon JE by looking at how the two dimensions have different effects on participation and performance indicators. They found on-the-job embeddedness was predictive of organizational citizenship and job performance. However, the researchers' findings did not support off-the-job embeddedness in either of these areas. The researchers also found that off-the-job embeddedness served as a better predictor of other indicators. Through their research, they discovered that off-the-job embeddedness was the only of the two that predicted voluntary turnover and volitional absences. Similarly, Porter et al. (2019) found that on-the-job embeddedness does reduce the likelihood of turnover following a

job search, yet a high off-the-job embeddedness results in a stronger positive relationship

between job search and turnover.

   *Generalizability and reliability.* The initial findings by Mitchell et al. (2001) supported

the reliability and predictability of both on-the-job and off-the-job embeddedness on retention.

There is subsequent research that has supported this position, even within different fields and

among smaller organizations (Coetzer, Inma, Poisat, Redmond, & Standing, 2019; Jiang et al.,

2012). However, Coetzer, Inma, and Poisat (2019) found that JE does not predict turnover in

smaller organizations and some researchers have found that the two dimensions are not always

applicable. Specifically, these findings have included conflicting support for the use of off-the-

job embeddedness. One example is related to the amount of job options within a market. Allen

(2006) found that off-the-job embeddedness might not have the same impact on job retention

when there are many employment prospects for the employee. In addition, research supports that

on-the-job embeddedness has a greater impact than off-the-job embeddedness on workplace

attitudes and behaviors, like job satisfaction, affective commitment, job search, and performance

(Ng & Feldman, 2014; Wheeler, Harris, & Sablynski, 2012). Further, Wheeler et al. (2012)

found that on-the-job embeddedness also had a greater effect on an employee's organizational

contributions. In fact, Feldman et al. (2012) found that off-the-job embeddedness could have a

negative impact on staff commitment. The researchers indicated that individuals with high

community embeddedness in areas that require a lot of time and energy resources, like roles

within the church and marathon training, can deplete resources needed to devote to work. As a

result, employees with these types of community commitments might be less able to cope with

work stress.

Multiple findings have shown a lower relationship between JE and workplace attitudes and behaviors and has resulted in the elimination of off-the-job embeddedness from some JE research. However, Ng and Feldman (2014) were able to support the relevance of community embeddedness and its relationship to on-the-job embeddedness. Through their research into COR, the researchers found that changes in community embeddedness was associated with changes in organizational embeddedness over time. Further, they found that community embeddedness was relevant in predicting job motivation and organizational identification. In addition, Ng and Feldman (2012) concluded that JE in one domain can influence and exacerbate JE in the other. Specifically, as on-the-job embeddedness and off-the-job embeddedness increase over time, employees can develop an increasing conflict between their work and community dimensions.

**Three components.** There are three components within JE: link, fit, and sacrifice. Each of these three dimensions are applied to the two dimensions of JE. These three components, and how they apply to the two dimensions, can be found in Table 1. An explanation of links, fit, and sacrifice both on-the-job and off-the-job is provided below.

*Links.* Links provide an explanation for the formal and informal connections that an individual has with people and groups, both at work and in the community, that provide them with support. On-the-job links are explained as workplace relationships. These relationships can be enhanced through the workplace affiliations and social support mechanisms that individuals form (Jiang, 2017). Within the community, links can include marital status, children who require care, extended family, and hobbies. Although these links are personal, they can impact an employee's willingness to leave a job.

*Fit.* Fit is the degree of harmony between an employee and their organization. Organizational fit can be explained by how an employee's goals and future intentions are consistent with organizational culture and offerings (Bambacas & Kulik, 2013). An individual can also experience fit within their community. Fit can occur as a result of the community services and offerings that an individual utilizes close to their home.

*Sacrifice.* Sacrifice is explained by the overall perception of the costs associated with leaving an organization or community. These costs include the psychological and physical benefits associated with the organization. Overall, these costs could be attributed to a loss of connections. For on-the-job embeddedness, compensation, a supportive boss, enjoyable colleagues, job stability, future job advancement, and retirement plan tenure can all be considered sacrifices if an individual decides to leave an organization (Ghosh & Gurunanthan, 2015). Within a community, the costs of leaving an organization, even without relocation, can be a change in childcare and a different commute. Costs associated with relocation can be even greater as an employee must consider the impact of losing community connections, the cost of a spouse changing jobs, and the impact on a child that would need to change schools (Feldman et al., 2012).

**JE compared with traditional analysis methods.** The focus of the traditional analysis methods has largely been on why people leave an organization versus why they remain with their job (Mitchell et al., 2001). Conversely, JE was designed to focus on why individuals choose to stay at their job. It is important to understand how JE relates to these methods before it is examined in the context of CNA retention in SNFs. The following section will consider how JE compares to the traditional methods of job satisfaction, organizational commitment, job search alternatives, and turnover contagion.

**JE and job satisfaction.** The relationship between JE and job satisfaction has been mixed. Research has shown that JE increases job satisfaction among employees. High JE allows employees to draw positive energy from their work, which further encourages their job satisfaction (Fasbender et al., 2018). Individuals with higher JE are more likely to have more opportunities for training and growth, both of which can make an employee feel more competent and satisfied at work (Biagioli, Prandi, Nyatanga, & Fida, 2018). However, a high JE can also have a negative impact on job satisfaction. As highly embedded employees see themselves as being more "stuck" in their job, work stress can have a more significant impact on their turnover intentions and potentially their likelihood to fail to perform at work (Lee et al., 2014). Failure to perform can result in more errors, a higher absentee rate, and a lower morale for coworkers.

**JE and organizational commitment.** In addition to examining the impact of JE on job satisfaction, the relationship between JE and organizational commitment been examined. Ghosh and Gurunanthan (2015) explained that the gap between traditional models for voluntary turnover and JE can be found in the organizational commitment dimension. On-the-job embeddedness largely explains an individual's "stuckness" or commitment to their job and organization. Potgieter, Coetzee, and Ferreira (2018) found that HRM practices like compensation, benefits, job characteristics, and development opportunities can encourage JE and further organizational commitment. In addition, an employee's perception of organizational support can influence JE. Employees value organizational rewards, growth opportunities, and procedural justice and these organizational benefits can enhance JE (Nguyen, Taylor, & Bergiel, 2017).

**JE and job search alternatives and ease of movement.** Employees with lower levels of JE have a stronger job-search-turnover relationship and are more likely to believe they have

more alternative employment options (Swider, Boswell, & Zimmerman, 2011). Notably, those

with high JE must find a better job to consider leaving, whereas those with lower JE might leave

for a similar alternative thereby shortening their time with an organization. Further, Swider et al.

(2011) found that job search alternatives were impacted by JE in conjunction with an interacting

influence of job satisfaction and high levels of job alternatives. According to Sender,

Rutishauser, and Staffelbach (2017), JE could mean the difference between an employee

choosing to leave or stay with an organization for on an unsolicited job offer. These findings

indicate that, although JE is not alone in the impact on job search alternatives, it is a significant

predictor.

**JE and turnover contagion and workplace ostracism.** The mitigating effect that JE has

on turnover contagion was explored by Felps, Mitchell, Herman, Lee, Holtom, and Harman

(2009). The authors hypothesized that turnover contagion was more likely to be effective when

employees were not embedded with their organization. They believed that the research would

show that the employee would be more likely to tether their decision to change jobs to the

decisions of their coworkers. The results of this longitudinal study showed that JE was

significantly and negatively related to the job search behavior of coworkers. As the impact of job

satisfaction and organizational commitment was considered, only JE was found to be significant

in determining turnover contagion related to coworker decisions. However, the social

connections that an individual has at work can also have negative impacts on JE. Lyu and Zhu

(2017) found that ostracism, or exclusion from coworkers in the workplace, can reduce an

employee's ability to cultivate JE.

**JE implications.** The JE construct was originally developed to provide an indication of

why people stay with their job. Research since its development has shown that the most

significant outcome of JE is related to intention to leave (Sun, Zhao, Yang, & Fan, 2012).

However, additional implications have been discovered by researchers. Notably, organizational

and community embeddedness both positively relate with overall life satisfaction of employees

(Ampofo, Coetzer, & Poisat, 2017). In addition, JE also has implications for job performance as

well as some potential negative effects.

       **JE and job performance.** There are many positive implications of JE on job

performance. Kiazad et al. (2015) determined that JE predicts in-role and extra-role performance.

Their findings show that individuals that have higher JE increase their performance to avoid

losing the resources they have acquired. Similarly, Wheeler et al. (2012) explained that those

with a higher JE have higher performance resulting from increased work effort related to the

energizing and directive effects of JE.

       *JE and in-role job performance.* JE has many implications on improved in-role job

performance. Notably, JE can mitigate circumstances that might reduce job performance. Job

performance and individual turnover decisions can be impacted when a negative shock or event

occurs in the workplace that causes an individual to experience thoughts of leaving (Biggane,

Allen, Amis, Fugate, & Steinbauer, 2017). Not all these thoughts result in turnover. Instead,

many individuals tend to negatively change their job performance. The ability of JE to mitigate

these shocks was explored by Burton, Holtom, Sablynski, Mitchell, and Lee (2010). The

researchers found that highly embedded individuals subjected to changes in leadership, staffing

pattern disruptions, or peer disagreements are less likely to have resulting negative changes in

their job performance. Instead, embedded employees rally around their organization, thereby

enhancing their organizational citizenship. Using their informal networks, highly embedded

employees are able to deepen their connection to their organization. Further, employees that are

highly embedded in their jobs are more innovative at work than their less embedded counterparts (Coetzer et al., 2018). JE employees that have a better fit and connectedness to their supervisors and coworkers are more likely to be high performers (Tian, Cordery, & Gamble, 2016). Finally, individuals with a higher JE have better attendance with a lower propensity to be late for work (Karatepe & Avci, 2019).

*JE extra-role performance.* Another benefit of a higher JE can be improved performance outside of an individual's normal role. Karatepe and Avci (2019) found that employees that value their supervisors had higher JE and were more willing to participate in extra-role performance. Extra-role performance includes taking on additional duties, working additional shifts, and working outside of one's typical work hours. This type of performance can assist supervisors in identifying individuals to cross-train and develop leading to growth for those with higher JE.

**Negative implications of a high JE.** Although the JE theory is now nearly two decades old, research into this construct is still in the early stages. However, some studies have noted potential negative effects of high levels of JE. Having a high level of JE does not necessarily mean that an individual is satisfied or happy in a job. In fact, highly embedded individuals might choose to stay with their job even in an adverse work environment (Allen, Peltokorpi, & Rubenstein, 2016). These highly embedded individuals simply feel stuck due to an inability to find a similar wage or opportunity elsewhere. The potential positive implications of JE can turn into negative performance when employees feel like they have lost control (Greene, Mero, & Werner, 2016). These individuals are referred to as reluctant stayers and, compared to enthusiastic stayers, reluctant stayers can have poor work performance and can negatively impact

the JE of those around them (Li, Lee, Mitchell, Hom, & Griffeth, 2016). The resulting behaviors

can include counterproductive work behaviors as well as increased absenteeism.

*JE and counterproductive work behaviors.* There are many counterproductive work

behaviors that can occur when an individual has a high JE that causes them to feel stuck in an

unhappy work situation. These include withdrawal behaviors and employee deviance.

Withdrawal behaviors can result in work avoidance as employees become less engaged and

distance themselves from work (Khan, Aziz, Afsar, & Latif, 2018). Further, sometimes higher JE

can result in counterproductive work behaviors as employees feel stuck and unable to leave an

organization, but are not motivated to perform (Lee et al., 2014). However, other research does

not support a linkage between JE and job performance at all (Sun et al., 2012).

Employee deviance can also occur when an individual with high JE is dissatisfied.

Darrat, Amyx, and Bennett (2017) found that salespeople with high JE and low levels of job

satisfaction were linked to organizational deviance, interpersonal deviance, and customer-

directed deviance. Abusive or negative supervisors can also cause workplace deviance among

employees with high JE (Avey, Wu, & Holley, 2015). However, Avey et al. (2015) also found

the levels of frustration felt by employees with abusive supervisors can be moderated by high JE.

Additionally, Collins and Mossholder (2017) determined that interactional fairness, or how the

employee perceives that their supervisor shares information and treats them, has a stronger effect

on those employees who are more embedded.

*JE and absenteeism.* Although a high JE can often result in a reduction of absenteeism,

sometimes off-the-job embeddedness can be a predictor of volitional absences (Lee et al., 2004).

Employees who have high levels of community commitments might be unable to manage their

time effectively and miss work. However, even high levels of on-the-job embeddedness does not

necessarily prevent absences. Employees that are highly embedded, and yet not satisfied, are more likely to have poor performance and increased absenteeism as they feel stuck and unhappy at work (Greene et al., 2016; Lee et al., 2004).

**JE related to demographics.** Demographics impact many behavioral outcomes. Further, Ghosh and Gurunanthan (2015) determined that demographics could moderate turnover intention related to JE. For these reasons, JE related to demographics has been examined in many studies. Within this research, JE related to CNA demographics were considered. For this reason, age, gender, tenure, educational level, and socioeconomic status related to JE research findings are discussed below.

**JE and age.** Research related to JE and age largely supports an increased embeddedness as an individual ages. Some research indicates that higher JE is found among older employees compared to younger employees (Aboul-Ela, 2018; Griffeth et al., 2000). In part, this can be attributed to the higher risk-taking potential of younger employees and the need for stability found in older employees (Griffeth et al., 2000). Still, research related to this demographic has been mixed. In the health care industry, Reitz et al. (2010) found that older nurses were more likely to be more embedded in their organization and not turnover. However, in another study related to nurses, Reitz (2014b) discovered that older nurses were less likely than their younger counterparts to remain at the same job.

**JE and gender.** Numerous studies have shown that there are gender differences related to turnover. In keeping with this, the relationship between JE and turnover has been found to differ among the genders for both on-the-job and off-the-job embeddedness. Likely due to the value that females place on communal relationships, research has indicated that females have higher JE than males in the work setting (Aboul-Ela, 2018; Jiang et al., 2012; Ng & Feldman,

2012). In addition, Holtom, Mitchell, Lee, and Eberly (2008) found that off-the-job JE decreases

turnover, particularly among females as these individuals are thought to be more likely to

consider the impact of relocating their spouse and children in their decision making. However,

not all research supports gender differences related to JE and turnover. Reitz and Anderson

(2011) learned that, in relation to JE, gender was not predictive of nurse retention for nurses in

rural markets. This could be explained, in part, by research from Griffeth et al. (2000) that

showed that the turnover behavior of educated women resembles that of men.

**JE and tenure.** Tenure can increase JE as long-term employees become more invested in

relationships and employer benefits. Ng and Feldman (2012) found that those in the middle and

late stages of their career had higher JE and brought a higher level of innovation to the job

related to JE. Further, the effects that JE has on work performance can grow with an individual's

tenure. This is particularly true of organizations that allow employees to vest in benefits or earn

increased benefits, like paid time off, as a result of higher tenure.

**JE and education level.** Additionally, JE has been considered related to education level.

Again, the results of this analysis have varied. Royalty (1998) explained that a higher education

level resulted in career-driven employees that have less ties to their organization. However,

Aboul-Ela (2018) indicated that there is no variation in JE among different education levels. The

differences between these two analyses might be explained by the findings of Griffeth et al.

(2000) that showed that there was no correlation between cognitive ability and turnover.

**JE and socioeconomic status.** Income can play a significant role in the links and

sacrifices seen by an employee that is considering whether to stay in a job. Dill et al. (2012)

considered the ability of low-wage earners to leave their current job. These researchers found

that job satisfaction was not a significant factor in retention as low-wage earners did not have the

resources to leave their jobs due to dissatisfaction. However, there are few findings that provide

a correlation between socioeconomic status and JE. Specifically, Reitz and Anderson (2011)

determined that no turnover link between JE and income among nurses existed.

      **JE and retention in practice.** As JE has become more commonly recognized, it has been

examined and considered among different cultures and industries. Research has shown that

cultural variances within different countries has an impact on how relationships are created

(Zhang, Fried, & Griffeth, 2012). Further, Van der Heijden, Peeters, Le Blanc, and Van

Breukelen (2018) asserted that every job and industry has its own unique set of job stress risk

factors that can impact turnover and retention. For this reason, the findings of JE globally and

within different industries is discussed below.

      **Globally.** Those living in individualistic countries tend to put less value into relationships

than those in collectivistic countries. The result is a looser development of relationships and a

reduced sense of belonging within individualistic countries. Given the differences among

cultures and the importance of relationships in JE, the JE construct has been examined

throughout the globe. During their exploration of the cross-cultural generalizability of the JE

model, Ramesh and Gelfand (2010) compared the model in the United States and India with the

intention of exploring turnover impact differences between an individualistic and a collectivist

country. In addition to validating this model in both countries, the researchers also incorporated

an additional form of embeddedness, which is family embeddedness. They found that family

embeddedness was both a significant predictor of turnover and that, with its inclusion, it

exceeded the impact of JE alone for both countries. Conversely, Jiang et al. (2012) determined

that the negative relationships between JE and turnover were stronger within collectivist

countries. Li, Li, Wang, Wang, and Newton (2019) examined the effects of JE on work-family

conflict and found that those that perceived a greater family embeddedness had lower work-family conflict and lower turnover intentions.

**Organizational type.** Individuals who choose to work for public institutions tend be risk adverse, which leads them to seek a job that provides a sense of security and stability (Lee et al., 2004). The resulting implication is that employees of private institutions could have a higher propensity toward leaving and a greater likelihood to value different aspects of their career than public workers. Jiang et al. (2012) was able to support this theory finding that workers in public organizations placed a greater emphasis on JE than their private organization counterparts.

**The hospitality industry.** In the hospitality industry, managers seek to employ those who are fully invested in providing services to their customers. JE has been examined in this industry to seek areas for improvement in service. Research into the hotel industry found that hotels with enhanced service orientation were found to have employees with higher JE and employees that were more enthusiastic about their focus on customers and quality (Arasli, Teimouri, Kilic, & Aghaei, 2017). Job search behaviors in hospitality have also been examined related to JE. Felps et al. (2009) surveyed 1,038 departments of a national hospitality firm to examine JE and job search behaviors. Findings showed that coworker JE was a significant predictor of turnover for employees; however, job satisfaction was not found to be a significant predictor of turnover in this study.

**Financial institutions.** Research into JE in financial institutions support the validity of JE in this industry. Aboul-Ela (2018) collected data from employees working in private banks in Egypt with the intention of examining the antecedents of demographics and organizational environment on JE. Through this research, it was determined that age, gender, training opportunities, and role ambiguity were all significant antecedents of JE. Felps et al. (2009)

surveyed 45 branches within a regional bank to determine if turnover contagion spreads from coworkers in this setting. Findings supported that JE acted as a mitigating factor related to coworker job search behavior. Further, Allen (2006) considered 259 employees from a large financial institution with less than 12 months of service. These findings showed that retention tactics related to investment in employees are positively associated with JE.

**Higher education.** JE research has also been conducted in the field of higher education. Potgieter et al. (2018) examined the relationship between JE and retention practices in higher education institutions. Specifically, they considered the impact of career concerns and workplace friendship on this relationship. Findings showed that career concerns were a boundary in the process of developing workplace friendships to support the on-the-job links needed for JE. In order to offset this and ensure that staff are able to develop important relationships, employers must ensure that employees have the opportunity to grow and develop within their careers.

**Application of JE and retention in the health care industry.** Given the findings related to JE and the relationship to turnover in other industries, it is valuable for health care leaders to understand the overall JE of staff and to understand ways to further embed staff. Traditionally, health care administrators have found themselves reacting to turnover through wages, bonuses, and professional development (Rosenbaum, 2018). These methods are costly and have not resolved the problem. However, the ability to apply the JE construct to the health care setting would allow for a more proactive approach that is aimed at retention.

**JE in acute care settings.** The original research related to the JE construct was conducted, in part, within a hospital. It was in this setting that Mitchell et al. (2001) examined 500 hospital employees, including 150 nurses, to find that JE was a better predictor of voluntary turnover than historical measures. Since then, additional research has been conducted in the

acute care setting. Due to the high amount of nurse turnover and its associated costs and care implications, nurse JE has been the focus in this setting.

*Nurse JE – validity and reliability.* Even though the original JE construct was developed through surveys conducted at a hospital, examining the JE of nurses is a relatively new practice. However, research has been completed to support the validity and reliability of JE for nurses within acute care settings. One of the earlier investigations into JE among nurses was conducted by Holtom and O'Neill (2004) who sought to learn if the JE construct was significant in predicting retention in the health care setting and if those factors that influence nurse retention differed from other staff in the health care industry. This longitudinal study showed JE to predict turnover among hospital workers beyond the traditional measures of job satisfaction, organizational commitment, job alternatives, and job searches.

Additional research into the relationship between JE and nurse retention has touched on many aspects of JE. Through a qualitative study, Hopson, Petri, and Kufera (2018) found that important themes among nurses surround building lasting relationships, the power of family and community, personal resiliency, and the desire for improved conditions. These nurses expressed a desire to learn and grow, a need for support from their peers, the importance of their family on career decision making, and the desire for better working conditions, and better salary and benefits. In addition, Biaglioli et al. (2018) determined that nurses with a high JE have positive outcomes which include higher job satisfaction and organizational citizenship. Further, results established that nurses and other health care workers are influenced similarly by dimensions of the JE construct. Additional research related to nurses and JE includes how the two dimensions of JE relate and how tenure impacts JE.

*Nurse JE – two dimensions of JE.* Research has been conducted regarding how the two main dimensions of JE relate to the nursing industry. Fasbender et al. (2018) examined how on-the-job embeddedness and off-the job embeddedness moderated the predictive effects of job satisfaction and job stress on the turnover intentions of nurses within the United Kingdom. Findings showed that off-the-job embeddedness strengthened the negative relationship between job satisfaction and turnover intentions. In addition, although the positive relationship between job stress and turnover intentions was buffered by off-the-job embeddedness, high on-the-job embeddedness resulted in an even stronger positive relationship between job stress and turnover intentions. As a result, it can be theorized that staff are better able to manage their work stress when they have proper community and home support. Related specifically to off-the-job embeddedness, Fasbender et al. (2018) observed that roles outside of their work can instead further strengthen job satisfaction. These results are supported by Reitz (2014a), who found that nurses consider the amount of extended family living in their community when consider their intent to remain employed.

*Nurse JE – tenure.* Halfer (2011) examined how tenure impacted JE for nurses. By considering nurses at varying levels of work experience, the researcher found that acute care nurses with less than three years of experience were more likely to leave their job than their more tenured peers. These less-experienced individuals were also found to have a lower off-the-job embeddedness as they were more likely to be younger, unmarried, and childless. In addition, these individuals were less likely to appreciate the importance related to aspects of on-the-job embeddedness like inclusion in the organizational work team and organizational fit. Similarly, Bratt and Gautun (2018) found that younger nurses were more likely to want to quit working in elderly services and seek to leave the SNF industry for acute care. For this reason, efforts made

by SNFs to focus on newer nurses can significantly impact overall retention (Edwards, Hawker, Carrier, & Rees, 2015).

**JE and retention in the SNF setting.** Despite the growing demands of the LTC population and the rising turnover numbers of direct care workers in SNFs, there has been limited research conducted into JE and retention within the SNF industry. The bulk of the existing JE research in SNFs has been on the nurse position. A significant function of nurses in SNFs is to supervise the work and performance of CNAs (McGilton, Chu, Shaw, Wong, & Poeg, 2016). As a result, understanding the implications of JE for nurses can help to better understand potential similarities for the relationship between CNA retention and JE.

*SNF Nurse JE.* Although a significant amount of research has been conducted on nurses in the acute care area, the amount of research related to nurses in SNFs is still limited. However, initial research supports the use of the JE construct in the SNF industry. Reitz (2014b) conducted a study on job retention of RNs in SNFs and was able to establish JE as a reliable explanation for why nurses stay. In his findings, total JE score and age were both significant predictors of retention of nurses, with highly embedded nurses being more likely to stay and older nurses being more likely to leave. In addition, the job search efforts of highly embedded nurses were found by Porter et al. (2019) to be less likely to result in turnover decisions than their less embedded counterparts. Off-the-job embeddedness has also been examined for nurses in the SNF industry. Although relocation bonuses are common in health care, research related to JE does not support relocating SNF nurses. Instead, finding nurses that live within the local community creates stronger embeddedness (Reitz, 2014b; Reitz & Anderson, 2011).

**Applying JE to CNA retention in SNFs.** An extensive search of the literature uncovered no research showing the application of the JE construct to CNA turnover in SNFs. However,

previous research into reasons behind CNA turnover and retention issues provides evidence and implications to support this application. Turnover reasons related to on-the-job embeddedness include workplace hazards, relationship challenges, facility factors, and organizational factors. Reasons related to off-the-job embeddedness include demographics and community factors as well as home and community demands.

   *Reasons for CNA turnover and retention in SNFs related to on-the-job embeddedness - workplace hazards.* According to Bazaszak-Holl, Castle, Lin, Shrivastwa, and Spreitzer (2015), CNA turnover is significantly higher than any other direct care occupation in the SNF environment. There are many reasons for this turnover, including the high amount of workplace hazards faced by CNAs. The SNF environment for CNAs is high stress for multiple reasons, including the physical demands of the position that can result in workplace injuries (Walton & Rogers, 2017). These injuries can come from physical assaults from combative residents as well as musculoskeletal issues that can result from physical mechanics of lifting, turning, and repositioning of residents (Arnetz et al., 2015; Gomaa et al., 2015).

   *Reasons for CNA turnover and retention in SNFs related to on-the-job embeddedness – relationship challenges.* In addition, areas like on-the-job links, or relationships, can be difficult to achieve and maintain for CNAs in SNFs. These relationships, or links, that CNAs develop on-the-job can include those with co-workers, residents, and leadership. Co-worker links are challenged when CNAs are subjected to toxic events at work like workplace bullying. Roswell, Demir, and Gulyas (2015) noted that workplace aggression was prevalent in SNFs. The researchers found that younger CNAs were likely to be subjected to bullying in the workplace, which impacts both the CNAs and their residents. Pickering, Nurenberg, and Schiamberg (2017) explored how workplace bullying impacted CNAs perceptions and ability to respond to job

stressors. These researchers attributed coworker bullying as a reason for abuse and neglect in nursing homes.

Another relationship, or link, that can be challenged or severed is the one between CNAs and their residents. CNAs often form a familial bond with their residents and then must endure their decline and death (Anderson & Havaei, 2015; Boerner, Gleason, & Jopp, 2017). The researchers found that supervisor support, caregiving benefits, and coworker support can help staff to cope with their grief and prevent burnout and grief avoidance. Critical caregiving benefits that can assist those working with the elderly and disabled can include end-of-life care training to help them better cope with these losses and to assist them with helping their patients through these inevitable changes (Boerner, Burack, Jopp, & Mock, 2015).

Finally, the relationship between CNAs and their leadership can become a concern. In addition to the stress associated with their work, CNAs also often feel undervalued by leadership. In a qualitative survey conducted by Brady (2016), CNAs expressed feeling at the bottom level of a SNF organization. Similarly, Jang et al. (2015) found that achieving respect for management is difficult for CNAs as they struggle with job satisfaction due to their perception that their position is at the lower tier of health care. This can be exacerbated by how nurses, who often act as supervisors, treat CNAs. Although CNAs interact with their residents more than nurses, nurses are often perceived as being unwilling to listen and respond to CNAs concerns regarding residents (Kolanowski, Van Haitsma, Penrod, Hill, & Yevchak, 2015). Perceived respect from supervisors can both improve CNA job satisfaction and partially mediate intent to leave (Berhens & Parmelee, 2018; Bethell et al., 2018).

*Reasons for CNA turnover and retention in SNFs related to on-the-job embeddedness - facility factors.* Facility factors are also associated with turnover rates and should be considered

by leadership as they identify ways to improve JE. Trinkoff et al. (2013) found that turnover

rates are higher in for-profit facilities, larger facilities, and facilities with lower-staffing levels.

The researchers also found that the payer mix of residents can impact turnover. Similarly,

Berridge et al. (2018) determined that non-profit facilities and those with higher RN and CNA

hours per patient day were also associated with higher retention as CNAs wish to have enough

time in their day to provide optimal care to their residents. Although employers cannot change

basic facility factors like profit status and size of the facility, they may need to focus on other

organizational factors to offset these areas as needed to increase JE.

 *Reasons for CNA turnover and retention in SNFs related to on-the-job embeddedness –*

*organizational factors.* On-the-job fit can be fostered through a focus on the organizational

factors that can impact CNA retention and turnover. These include organizational commitment

and culture, autonomy, and pay. Retention can be supported through establishing CNA

commitment to an organization through the quality of care provided to residents and through the

culture of the organization. Multiple studies have found that CNAs want to work for an

organization that provides high-quality care (Gray et al., 2016; Kusmaul & Bunting, 2017).

Specifically, CNAs value the relationships they establish with residents and their family

members (Gray & Lukyanova, 2017). For a CNA, it is also important that they feel valued by

their organization. Berridge et al. (2018) examined the impact of empowerment practices and

nursing home culture change on retention of CNAs in over 2,000 SNFs. The researchers found

that those facilities with high and medium empowerment scores had a likelihood of higher CNA

retention at 64 percent and 44 percent, respectively. However, Bazaszak-Holl et al. (2015)

discovered that, although organizational culture impacted turnover for RNs and LPNs, it did not

for CNAs. This indicates that in some situations, CNAs are more likely than other direct care staff members to leave their organization for a better opportunity.

Butler, Brennan-Ing, Wardamasky, and Ashley (2014) examined why some home-care aides stay and why others leave. The researchers found that long-term tenure was associated with a greater sense of job autonomy. Additionally, Maurits, de Veer, van der Hoek, and Francke (2015) also uncovered that those CNAs who perceived that they had more autonomy were more engaged in their work and less likely to consider leaving health care. In a literature review conducted by Squires et al. (2015), the researchers also supported the importance of autonomy for CNAs, finding that the only individual factors that were important to CNA satisfaction were empowerment and autonomy.

Pay is a significant factor in turnover among CNAs. According to PHI (2013), many direct care workers do not have health insurance and 48 percent live below poverty levels and also have little room for advancement. Wiener et al. (2009) connected a $1.00 increase in pay to an increase in retention among CNAs. Supporting these findings, Butler et al. (2014) found that long-term stayers were less concerned about wages than their counterparts who turned over within a year. Interestingly though, Brady (2016) determined that CNAs want more money without the requirement of additional work. This indicates the underlying concern that CNAs feel undervalued and believe that the amount of work that they do does not match their earnings.

*Reasons for CNA turnover and retention in SNFs related to off-the-job embeddedness – demographics and personal factors.* Results related to CNA demographics and personal factors like age, gender, experience, and training environment have varied. Wiener et al. (2009) found that demographics were the most significant predictor of turnover and that those who were under 30 years old and male have the highest turnover rate. Conversely, Squires et al. (2015)

discovered that demographic factors like age, ethnicity, gender, education level, and years of

experience were not significant contributors to turnover. Much of the differences surrounding

age-related turnover rates could be attributed to the way that different generations view work

relationships. According to Hagerty and Buelow's (2017) research, baby boomer CNAs believe

that their supervisor did not understand their work concerns and younger, millennial CNAs

reported negative interactions with their peers. In addition, new CNAs have a high turnover

during their first year and often leave the occupation completely. In a study conducted by Meyer

et al. (2014), researchers followed a group of 123 CNAs after their initial training. They found

that 46 percent were no longer in the field after one year. In addition, these individuals did not

typically leave for jobs that paid more and reported leaving for a job with fewer benefits than had

been available to them as CNAs. The main explanations provided by those that had left was that

workload worsened overtime and there were too few advancement opportunities.

Training hours and quantity can also be an important factor in the retention of new

CNAs. Han et al. (2014) determined that CNAs report higher satisfaction with their jobs when

they feel that they receive high quality training during their CNA certification programs. The

minimum number of hours that are allowed for CNA training programs is 75 hours; however,

many states require longer programs (Code of Federal Regulations, 2012). Han et al. (2014)

found that those programs that did require additional training hours graduated CNAs with higher

satisfaction levels.

*Reasons for CNA turnover and retention in SNFs related to off-the-job embeddedness –*

*home and community demands.* CNAs are also often caregivers at home as well as at work which

can cause the off-the-job links to have a greater impact on their JE. According to the U.S. Bureau

of Labor Statistics (2015), 89 percent of CNAs are female. Due to gender roles, women are often

the individuals in a family unit that are expected to provide family care (Ward-Griffin et al.,

2015). The result is CNAs that provide double care (i.e., care at work and at home to children or

elderly family) or triple care (i.e., care at work and at home to both children and elderly family).

DePasquale, Mogle et al. (2018) examined the impact of unpaid, home caregiver roles on the

work strain for CNAs. Findings showed that these roles caused a time squeeze for staff members

that results in emotional exhaustion that can have turnover implications. The impact of the

family time squeeze on CNAs is supported by DePasquale, Polenick, Davis, and Berkman

(2018). However, these researchers found that the burden of double and triple duty care could be

eased through the support of husbands.

In addition to the burden of care at home, CNAs might also feel that they are missing

quality time with their families. CNAs work in a 24-hour industry and the demands of their

employer include off-shift work, weekend, and holiday expectations. As a result, CNAs might

feel rushed or lacking for what is perceived as adequate family time. This can result in work-

family conflict, which is correlated with more job demands, less job control, longer work hours,

and a feeling of less social support (Zhang, Punnett, & Nannini, 2016).

**Retention strategies developed through JE.** Overall, there is no one template or process

for enhancing JE. However, the JE construct can be used to assess the employer-employee

relationship (Reitz & Anderson, 2011). Through research, an industry can identify areas where

employers should focus efforts to embed an occupation. In addition, the JE construct can be used

by individual employers to analyze both the organization and the community to determine

strengths that can be capitalized on to create an effective retention strategy based on their

location and organizational offerings.

Even in circumstances where JE explains only small, incremental variance in turnover, the cost savings for an organization that develops strategies around these findings can still be significant (Jiang et al., 2012). Human resource management (HRM) practices encourage employee embeddedness and in turn improve job performance (Tian et al., 2016). Employers must track employee retention and JE and react promptly when retention and JE are low. To be most successful, organizations should focus their efforts on improving where JE is lacking among their employees. Employee participation, socialization and mentorship, employee behavior management, leadership and development opportunities, performance appraisals, and community activities and engagement are all some of the HRM practices that should be considered by employers.

**Employee participation.** By allowing employees to have input in organizational decisions, companies can increase fit for their staff and lower turnover. Organizations that match their employee's values are more likely to benefit from JE. These efforts can be fostered by allowing employees the opportunity to provide input into how they perform their job (Reitz & Anderson, 2011). Flexible scheduling, methods for airing concerns, and providing job security, can all increase an individual's fit within their organization (Gardner, Wright, & Moynihan, 2011). In addition, Felps et al. (2009) recommends creating work groups to actively raise embeddedness scores. The make-up of these groups is critical and should contain a mix of highly embedded staff and those that have the potential for increased embeddedness. These work groups increase links by fostering employee participation and by providing socialization among colleagues within different departments that might not ordinarily interact and network.

**Socialization and mentorship.** Socializing employees can encourage JE and can be managed by organizational leadership to encourage embeddedness. Through deliberate

socialization tactics, employers can help embed new employees within the organization (Allen, 2006). In addition, Chen and Ayoun (2019) found that employees that can utilize humor felt that they had more supervisor support and reported better coworker socialization. Workplace friendship provides important socialization needed for job satisfaction and success. Employers should consider connecting employees that do not usually interact through working parties and interdepartmental committees (Reitz & Anderson, 2011). Mentorship can also assist with socialization. Reitz and Anderson (2011) recommended matching nurses with local mentors through online forums to retain nurses. The social links that are developed by an employee at work increases an individual's overall embeddedness, personal satisfaction, and work environment.

In the nursing industry, research shows significant retention improvement can occur if organizations assign a preceptor and arrange for regular meetings among the new nurse and the preceptor for up to two years following hire (Blegen et al., 2015; Brook, Aitken, Webb, MacLaren, & Salmon, 2019; Figuerola, Bulos, Forges, & Judkins-Cohn, 2015; Irwin, Bliss, & Poole, 2018). Additionally, Silvestre, Ulrich, Johnson, Spector, and Blegen (2017) uncovered a 72 percent difference in the turnover rate for those in a transition to practice program. Mentoring programs have also proved to be a successful option. Zhang, Qian, Wu, Wen, and Zhang (2016) examined nurses that leave their roles in the first year. From their observations, the researchers recommend that mentor programming that utilizes careful matching of staff members based on certain characteristics as opposed to random assignments, can create greater links among staff.

However, workplace relationships do not always provide positive results. Potgieter et al. (2018) found that certain factors, specifically career concerns, can serve as a boundary for the psychological process created by workplace relationships. To counteract this, employees should

be kept informed of career options within their organization. In addition, companies should avoid the appearance that some employees have more opportunities than others.

**Employee behavior management.** However, the links that employees create with their coworkers can increase job search intentions. Felps et al. (2009) recommended that managers discourage gossiping at work. As employees are searching for job alternatives, discouraging discussion surrounding this behavior can reduce the likelihood of turnover contagion among the less embedded. Further, encouraging a person-centered environment among employees is important to offset turnover contagion. Potgieter et al. (2018) determined that the key to meeting the career demands of valuable employees surrounds enhancing work conditions and practices in order to maintain a person-centered environment.

**Leadership and development opportunities.** Organizations can improve JE through improved supervisor support and career development opportunities. Supervisors have a significant impact on an individual's JE. Ferreira (2017) found a relationship between JE and ethical leadership. As a result, the authors recommend that middle managers are selected based on their ability to focus on the needs of their subordinates. Further, offering leadership training can help to improve leadership skills that not only embed leaders but also embed subordinates that respond to leadership support.

Formal training provides employees with additional resources and helps to improve fit (Gardner et al., 2011). Employees with less role ambiguity and more training opportunities have been found to have higher JE (Aboul-Ela, 2018). In addition to on-the-job training, employers should also consider tuition reimbursement and investment in education that improve an employee's occupational status (Gardner et al., 2011). JE can also be used to assess an

employee's commitment to determine who should be groomed to climb the corporate ladder so
that these benefits can be maximized (Reitz, 2014b).

   **Performance appraisals, promotion cycles, and benefits.** HRM practices are critical to
managing on-the-job embeddedness. Organizations must monitor performance appraisal cycles
closely so that managers are able to intervene when they begin to perceive a reduction in an
employee's JE (Burton et al., 2010). Employers should consider individual and team incentives
to appeal to employees that are embedded based on achievement and relationships. This practice
is another method used by employers to develop advice networks and create links among staff.
Vested retirement and effective health care benefits can also increase the sacrifice related to
leaving a job (Reitz & Anderson, 2011).

   **Community activities and engagement.** Off-the-job embeddedness has been shown to
help employees manage job stress and reduce their likelihood to leave their job. For this reason,
Fasbender et al. (2018) recommends encouraging a strong work-life balance that allows
employees to develop passions and activities outside of the workplace. These community
networks can assist employees as they deal with work stress. Further, as employees seek to
escape overall stress in their life, a stressful home life can cause an employee to quit their job,
even if their stress is not at work. Thakur and Bhatnagar (2017) found that work-life balance
embeds employees in their organization. However, the work-life balance needs of an employee
change as they move through different life and career stages. HR managers must assess the
future needs of their employees to stay aware of current work-life balance needs to retain
employees.

   As a result, researchers recommend focusing on ways to engage employees in their
community. Reitz and Anderson (2011) recommended encouraging employees to participate or

volunteer in community activities to increase their fit. This could mean that organizations

establish telethons or create resource gathering initiatives to benefit a shared cause. Leadership

within organizations seeking to encourage off-the-job embeddedness for their employees should

also consider subsidizing home purchases in desirable neighborhoods (Ramesh & Gelfand,

2010).

**Implications for JE related to CNA retention.** Given the lack of research related to

CNA JE, the potential implications of JE related to CNA retention must be inferred based on

prior research findings related to CNA retention and based on the JE research that exists for the

nursing industry. As a result, the following concepts should be considered for CNA retention in

the SNF setting. Similar to findings related to nurses, organizations can affect CNA retention by

focusing on social support, fostering a work-life balance, and aligning their organization with

staff values. However, the uniqueness of health care could result in findings in the CNA

occupation that differ from those found for JE in other fields.

**Implications for CNAs – social support.** Staff in SNFs find significant support from

those they interact with in their facilities. Direct care workers tend to be more enmeshed in their

jobs when they feel supported by coworkers and supervisors (Karatepe, 2016; Singh, Shaffer, &

Selvarajan, 2018). In addition, Petitta et al. (2016) found that nurses absorb both positive and

negative emotions from their coworkers, leaders, and patients. Flinkman and Salantera (2015)

determined that social support is particularly critical in assisting younger nurses in dealing with

the stressful working conditions that can exist in SNFs. Similarly, new CNAs can benefit from

social support as the first six months as a CNA is a critical time for CNA retention (Meyer et al.,

2014). Wiener et al. (2009) discovered that providing a mentor for a CNAs first position as a

CNA can improve their likelihood to stay in the industry.

Specific to CNAs, the research of Woodhead, Northrop, and Edelstein (2016) supported the importance of factors within the JE construct in preventing CNA burnout. These researchers found that stress in this position could be mitigated through job resources, that match aspects of the Fit component of the JE construct. These include support from supervisors and coworkers and the opportunity to provide nurturing to others. In addition, Roswell et al. (2015) found that social support, both at work and outside of work, can help to protect CNAs and offset the impact of workplace bullying.

**Implications for CNAs – work-life balance.** Work-life balance is critical in the nursing industry as it can foster JE (Dechawatanapaisal, 2017). Work-family-school role conflicts can also lead to increased burnout for CNAs that are in school to further their clinical capabilities (Chen, Yang, Gao, Liu, & De Gieter, 2015). However, this can be mitigated with a local support system, or links, both in the facility and in the community (Yamaguchi, Inoue, Harada, & Oike, 2016). In addition, flexible scheduling can impact work-life balance for nurses and should be considered for CNAs as well (Reitz & Anderson, 2011).

**Implications for CNAs – organizational alignment.** Reitz (2014a) determined that nurses are inclined to become more closely embedded with organizations that have a strong patient value orientation. Since CNAs value their ability to provide compassionate care and the desire of their organization to foster great care, CNAs embeddedness could also increase with organizational commitment to patient orientation (Gray et al., 2016). Reitz (2014a) also found that a highly embedded employee might be more willing to go to another unit or change shifts for the benefit of their organization. This is important in health care where often the needs of the facility do not match the schedules of staff.

**Implications for CNAs – uniqueness of health care.** Finally, the nursing field is unique and some attributes of JE that are likely to be significant for other industries might not apply for nurses and CNAs. For example, Karatepe and Avci (2019) postulated that the difficulty to find and replace nurse staff reduces the likelihood that high levels of JE will result in extra-role performance. Also, contrary to other JE studies that show that co-worker support can increase extra-role performance, the researchers did not find it to be true for nurses. Lastly, Yavas, Karatepe, and Babakus (2014) found that nurses do not value organizational resources, like training.

**Summary of the literature review.** CNA turnover is problematic for the SNF industry as it causes increased costs and care issues within facilities. Although the issue of why CNAs leave their jobs has been examined for decades, turnover rates in this field continue to persist and climb. Current research has not examined JE or why CNAs choose to stay in their position. Although a gap has been identified in the research related to the relationship between CNA retention in SNFs and JE, there is research that supports the relevance and application of the JE construct within many industries and fields. JE has been studied related to retention of other direct care staff in SNFs, specifically nurses, and areas of other research on CNA retention can be compared to elements of the JE construct. As a result, the existing literature does support the hypothesis that a relationship exists between JE and CNA retention in SNFs. In an occupation that has concerning turnover levels, the literature supports the importance of examining JE related to CNA retention to produce potential ideas for retention efforts.

**Transition and Summary of Section 1**

Section 1 discussed the independent variable of JE and the dependent variable of CNA retention in the SNF industry. This section provided the foundation of the study as well as a

literature review. The foundation of the study established the problem and purpose of the study.

This study is designed to address the problem of high turnover of CNAs which has resulted in

increased costs and reduced quality of care for the SNF industry. The foundation is also used to

explain the nature of the study, research questions, hypotheses, and theoretical framework that

provide the basis for the research methods in this study. The literature review explored the

professional and academic research surrounding the dependent variable of CNA retention in

SNFs, historical methods for evaluating turnover and retention, and the development of the JE

construct by Mitchell et al. (2001) to better explain why people stay with their current job.

Further, the literature review provided implications and results of the JE construct in various

industries and specifically in the SNF setting. Since there has been no research conducted related

to JE for CNAs in the SNF industry, previous research related to CNAs was evaluated to identify

areas where JE is applicable. The following section will review the research methodology to be

used during this study.

**Section 2: The Project**

Certified nursing assistant turnover remains high for CNAs in the SNF industry in spite of years of research into why CNAs leave their jobs. The result is additional cost to SNFs and a negative impact on quality of care. The relationship between the factors that cause a CNA to stay with their job, or their JE, and CNA retention, has not yet been considered. This quantitative, correlational research study uses the JE instrument to examine the relationship between JE and CNA retention in SNFs.

The focus of Section 2 is on the research methods and design that was employed for this study. The discussion will include the purpose statement, the role of the researcher and participants, population and sampling, data collection, data analysis, and data validity and reliability. Data collection included a description of the instrument and as well as data collection and organization techniques. Data analysis also included a description of the variables, how they were related to the problem, and the research questions and hypotheses.

**Purpose Statement**

The purpose of this correlational, quantitative study evaluated of the relationship between JE and retention for CNAs in the SNF industry. The intent was to reduce high turnover rates that lead to lower quality of care and higher expense costs. This purpose was met through a study conducted within one multi-center, SNF chain. The chain has faced CNA turnover rates that have negatively impacted quality of care and caused unnecessary recruitment and onboarding expenses. The variables were measured using the JE instrument, a 40-item, six-factor tool that is used to assess why employees stay at their job (Mitchell et al., 2001). This instrument was administered to full-time CNAs at 42 centers. In addition, questions related to demographics and

intent to stay were asked as numerous studies have linked JE and employee demographics (Aboul-Ela, 2018; Ghosh & Gurunanthan, 2015; Jiang et al., 2012).

Findings were used to meet three objectives. First, the researcher examined the relationship between JE and retention of CNAs. Second, the data were refined to see if the relationship between JE and CNA retention is impacted by certain demographics. Finally, the relationship between CNA retention and the subcomponents of the JE construct were examined. Reitz and Anderson (2011) determined that the JE instrument can assist with the assessment of employee-employer relationships so that organizational leadership can be informed of human resource (HR) practices that embed their employees and increase retention. The findings from this study can be used by the leadership within the SNF chain to determine ways to increase JE for the factors that are found to be related to retention. In addition, demographic findings will allow leadership to further refine their decisions as needed based on the demographics of CNAs within individual centers.

**Role of the Researcher**

The researcher's role included activities related to the planning and facilitation of the research. First, the researcher determined the best tool for conducting this research, the JE instrument, and received approval to utilize the tool. Next, the researcher identified a research site and the participants to use within this site. The research site utilized was a large, for-profit SNF chain and the researcher obtained permission to contact all full-time CNAs within this chain (T. Putney, personal communication, August 27, 2019). This contact was made through a letter that was distributed by facility-based leadership. To effectively communicate, distribute, and collect surveys, the researcher worked closely with executive leadership within the SNF chain and developed a plan for this process. Questions from the survey instrument were transferred by

the researcher to an electronic survey prior to distribution to the participants. Finally, the

researcher collected and analyzed all data obtained through this survey and analyzed and

presented the overall findings. Throughout this process, the researcher ensured data integrity and

was mindful of personal biases.

**Participants**

Access to the participants was gained through approval by the SNF chain leadership and

all full-time CNAs over the age of 18 were selected (Appendix A). The participants include over

1300 CNAs employed at one of the chain's 41 qualifying facilities (T. Putney, personal

communication, August 27, 2019). Initial contact was made with the participants through a letter

from the researcher that was distributed within their facility by the nursing home administrator

(NHA) or their designee. Prior to participating in the survey, an informed consent was provided

to ensure that the ethical protection of the participants was adequate. The informed consent

included the participants right to privacy, right to refusal, and right to discontinue participation at

any time during the survey. There are no vulnerable members of this population as those under

18, those who are mentally disabled, and those that directly report to the researcher, were

excluded from the population. The data was collected through an anonymous survey and the data

was stored on a password protected computer that is only accessible by the researcher. The data

will be destroyed after the required storage time period has passed.

**Research Method and Design**

This quantitative research study gathered data through the administration of the JE

instrument using an online questionnaire. IBM SPSS was used to analyze the collected data. A

quantitative research method was selected to investigate the research questions in this study. This

research method and design was selected as it allowed the researcher to examine the problem and

meet the purpose of this study. Using a quantitative, correlational study, information learned from the relationships identified between JE and CNA retention in SNFs was used by the researcher to become better informed of possible CNA retention practices. A general discussion of the research method and design are provided below.

**Discussion of method.** The intent of this study was to examine the relationship between JE and CNA retention in SNFs. For this reason, a quantitative, cross-sectional, and non-experimental method was chosen. The quantitative method was selected as its primary purpose is to examine and predict relationships among variables that can then be measured numerically to explain a phenomenon (Martin & Bridgmon, 2012). Through the quantitative method, the researcher sought to establish the reasons behind variances and the associations between the variances of studied variables (Curtis, Comiskey, & Dempsey, 2014). The variables being studied are the independent variable of JE and the dependent variable of CNA retention in the SNF industry.

**Discussion of design.** The relationship was examined using a correlational design. The central research question for this study surrounds the relationship between JE and CNA retention in SNFs. The survey design allowed for the JE instrument to be distributed to a large group of CNAs so that a correlation analysis could be conducted. Within a correlational study, no intervention occurs and the researcher does not manipulate the variables. This process permitted the existing statistical relationship to be analyzed (Creswell, 2014). Through this approach, this researcher was able to generalize results from the sample to the overall population of CNAs working in SNFs (Norwood, 2010). In addition, the cross-sectional, survey design also allowed for a rapid turnaround of collected data (Fowler, 2009).

**Summary of research method and design**. This study utilized a quantitative, correlational research method and design. A cross-sectional, non-experimental method was chosen and the collected data was analyzed using IBM SPSS statistical software. This method and design allowed this researcher to examine the variables of JE and CNA retention to analyze their statistical relationship. The intention was to generalize the results from this study to better understand the relationship between these two variables to apply to the CNA population as a whole and address the business problem of CNA turnover in SNFs.

**Population and Sampling**

Surveying the entire population would provide the most accurate information related to the topic being studied. However, because of the size of the population involved in this research, collecting data from the entire population would not be cost-effective or practical. As a result, the researcher conducted research using a sample of the population. The following section includes a description of the population from which the sample was drawn, the sampling method and sampling frame that was used, the sample size and type, eligibility criteria for participants, and the relevance of characteristics within the selected sample.

**Discussion of population.** According to Mendenhall and Sincich (2012), a population is the data set of interest and is typically large. The target population for this study included CNAs who work in SNFs and are over the age of 18 years old. According to the U.S. Bureau of Labor Statistics (2015, there are approximately 600,000 CNAs employed in SNFs across the United States (PHI, 2015). Most of these CNAs are assumed to be over the age of 18.

**Discussion of sampling.** Banerjee and Chaudhury (2010) described sample selection as a small portion of the whole population that allows the researcher to draw inferences about the population. Population-based probability sampling provides the ideal sample of a population as

members of the target population have equal chances of being selected and yield an unbiased

sample that should be representative of the population (Bornstein, Jager, & Putnick, 2013). This

form of random sampling method was preferred; however, random sampling required the

researcher to have access to the entire population. There are a large number of CNAs in the

United States and access to their contact information was limited to the availability and approval

of the certifying board from each individual state. Since the population as a whole was not

identifiable, the sampling method for this study was nonrandom, or a convenience sample.

According to Jager, Putnick, and Bornstein (2017), convenience samples are the standard when

purposive sampling would be too cost prohibitive or hard to identify. In addition, Jager et al.

(2017) found that similar characteristics, or a homogenous sample, allows for survey results to be

more generalizable than those found when using a broader convenience sample. For this reason,

the sampling frame for this research included CNAs employed by the research site, the for-profit

SNF chain. There were over 1,200 eligible participants for this study.

**Sample size and type.** The sample size was determined using Cochran's sample size

formula. Bartlett, Kotrlik, and Higgins (2001) reviewed the procedures for utilizing Cochran's

formulas to explain how to generalize findings from a smaller sample back to the population

while accepting a level of random error. The researcher selected a confidence level of 95% as

Junk (1999) described this level as offering an acceptable balance between accuracy and

consistency. Based on the size of the population, a standard confidence level of 95%, and a

confidence interval of 5%, the required sample size for this convenience sample is 384 (Bartlett

et al., 2001).

**Eligibility criteria and relevant characteristics of the sample.** In order to qualify for

this study, a CNA must have been employed full-time by the research site and be at least 18

years of age. These characteristics were essential as it was important that the individual be

employed full-time to properly gauge JE for this role (T. Putney, personal communication,

August 27, 2019). Additional demographics were a part of the study and were examined in order

to answer Research Question 2. The demographics that were included in the questionnaire were

gender, age, and years as a CNA.

   **Summary of population and sampling**. The population of employed CNAs in the

United States is over 600,000 individuals, and accessing their contact information to conduct a

random survey would require excessive cost and time. As a result, this survey used a non-

random, convenience sample of the population to answer the research question. Eligibility to be a

part of this sample included individuals who were CNAs employed by the research site full-time

and were over the age of 18. Utilizing Cochran's formula, the required sample size to generalize

the sample back to the CNA population as a whole was 384. Fortunately, the research site

offered over 1,200 individuals who were eligible to participate.

**Data Collection**

   Data collection was completed with the use of one survey instrument, the JE instrument,

that was utilized to collect quantitative data. In addition, demographic data, facility data, and

intent to stay information were collected. Within the data collection section, the research

instrument is described to include the concepts measured by this instrument, how the scores were

calculated, and an assessment of the reliability and validity of the instrument. The section also

includes a description of the data produced for each variable in the study and how it was

obtained. Finally, this section includes the processes required to complete the survey and where

raw data is available.

**Instruments.** The instrument, JE, measures the reasons why a person stays with their job (Mitchell et al., 2001). The JE instrument is a 40-item tool that utilizes a five-point Likert-type scale (5=strongly agree, 4=agree, 3=no opinion, 2=disagree, 1=strongly disagree) as well as short fill-in-the-blank and yes or no questions. The Likert-type scale questions provided ordinal data, and the fill-in-the-blank and yes-or-no questions provided scale and nominal data, respectively. Twenty-six of the items measured the organizational component and fourteen measure the community component. In addition, JE is formed from six factors or subcomponents (Law, Wong, & Mobley, 1998). These subcomponents are Fit-Community factor, Fit-Organization factor, Links-Community factor, Links-Organization factor, Sacrifice-Community factor, and Sacrifice-Organization factor. There is no correlation within these subcomponents and there are differing number of items within each one, ranging from three to ten. As a result, it was necessary to find the mean for each subcomponent and then aggregate the subcomponents and find an overall mean to establish the JE score. Through this process, standardization was completed in order to provide equal weighting and to control for the 6 different subcomponents of the instrument. A higher overall aggregate JE indicates that the employee has a higher embeddedness, whereas a lower JE indicates that they have lower embeddedness.

The Cronbach's alpha value for the reliability of the JE instrument was found to be .87 by Mitchell et al. (2001), the creators of the instrument. The validity was also tested by Holtom and O'Neill (2004) who found the Cronbach's alpha value to be strong at .89. These values indicated an acceptable reliability as they fell between the acceptable levels of .70 and .95 established by Tavakol and Dennick (2011).

**Background data.** In addition to the data collected through the JE instrument, the survey also included a background portion. First, data were collected to ensure that the criteria

requirement was met for each participant. To be considered in this study, participants confirmed

that they were over 18 years of age, a full-time employee of the SNF chain, and a CNA. Next,

data were collected to establish demographics of the participants and to provide potential

moderating variables of the survey that were used to answer research questions and provide

further analysis. These demographics included gender, age, and length of time as a CNA. Gender

provided nominal data, and age and years as a CNA provided scale data. By collecting

demographic data, the researcher was able to assess the transferability for these demographics

and to measure the impact of these demographic variables in the data analysis. Additionally,

facility-based characteristics of facility location (i.e., urban *versus* rural) and facility size were

requested within the background portion of the survey. Facility location and bed size both

provided nominal data. Finally, retention data were collected through the participants self-

reported intent to stay. The two questions "Do you intend to remain at your present facility for

the next year" and "I intend to remain at my present facility for the next 12 months" were

provided to the participants. These questions were listed on different pages of the survey to

strengthen the validity of this factor (Reitz et al., 2010). Appendix B contains permission to use

the JE instrument granted by Terrence Mitchell. Appendix C contains a sample of the

background survey portion as well as the JE survey.

**Data collection techniques.** Prior to data collection, IRB approval was obtained through

Liberty University's Institutional Review Board (Appendix D). A letter requesting access to the

participants was sent to leadership within the SNF chain and permission was granted. Through

email and follow up calls, instruction was provided by the researcher to each of the chain's 41

participating facility administrators. These administrators were given the recruitment letters to

distribute to the potential participants with paychecks and to post at nursing stations. Participants

were given 21 days to complete the survey. After seven days and again after 14 days, a reminder was provided to the facility administrator to continue to recruit CNA participation. After 21 days, the survey was closed (T. Putney, personal communication, August 27, 2019). Participants which self-identified as meeting the necessary criteria, the CNAs over the age of 18 that are employed full-time by the SNF chain, were able to access a link provided to the online survey. Consent information was the first item accessed by the participant and only surveys that acknowledged consent were accepted.

**Data organization techniques.** Data privacy was ensured through anonymous reporting of only information that is necessary to answer the research questions (Stake, 2010). In addition, all anonymous response data were submitted electronically through SurveyMonkey using enhanced encryption pages that allowed for secure transmission of data. The raw data were exported from SurveyMonkey and stored on the researcher's password-protected computer. The researcher has sole access to the data; however, raw data are available upon request from the researcher.

**Summary of data collection**. In this study, data were collected using the JE instrument combined with background and demographic questions. Participants were administered the survey online using an electronic survey tool. With permission and assistance from the SNF chain, data were collected from consenting participants over a 21-day period. These data are anonymous and are stored on a password-protected computer that is only accessible by the researcher.

## Data Analysis

For this study, the independent variables are aggregate JE and the scores for the individual subcomponents that compose JE. The dependent variable for the research is CNA

retention in SNFs as defined by self-reported intent to stay. Moderating variables are identified

as demographics which include gender, age, and years as a CNA.

**Variables.** The dependent variable for all research questions and hypotheses is CNA

retention. This variable provides nominal data and was collected through surveying the

participants with two questions related to their likeliness to stay with their current facility for the

next year. These questions were adapted from Hom, Griffeth, and Sellaro (1984) in which the

researchers had the participants evaluate their likelihood for organizational resignation. Table 2

describes the variables that were used in this study and an additional discussion of variables will

be found within the demographic and hypotheses sections.

Table 2

*Study Variables*

| | |
|---|---|
| Independent Variable | Job embeddedness aggregate score<br>Job embeddedness subcomponents |
| Dependent Variable | CNA retention |
| Moderating Variables | Gender<br>Age<br>Years as a CNA |

**Demographics.** Previous JE research in health care has shown that demographics are

important moderating factors related to turnover (Reitz, 2014b; Reitz & Anderson, 2011).

Demographic data of gender, age, and years as a CNA were collected and processed in Microsoft

Excel. The nominal data of gender and the scale data of age and years as a CNA were analyzed

using IBM SPSS statistical software. Frequency percentages of the demographic data were used

to better understand the sample and to assist with Hypotheses 2. Tables and graphs were used to clarify and present the descriptive statistics of the data including frequencies and percentages.

**Hypothesis 1.** The aggregate JE score provided the independent variable for the research question and Hypothesis 1. The data collected from this instrument included Likert-type scale data, or ordinal data, as well as short-answer and yes-or-no questions which provided scale and nominal data, respectively. Because there are different numbers of items within each of the six subcomponents of the JE instrument, data were processed and standardized through Microsoft Excel. This process required the researcher to standardize the scores and establish the mean for each subcomponent prior to aggregating the scores to allow for equal weighting and to control for the 6 different subcomponents of the instrument (Reitz et al., 2010). With the aggregate scores established, the relationship between the aggregate JE score and the dependent variable of CNA retention were examined to establish the correlation coefficient utilizing IBM SPSS.

**Hypothesis 2.** Although the independent variable for the research question and Hypothesis 2 was also the aggregate JE score, the impact of demographic moderating variables were considered for this hypothesis. Previous research has indicated that the demographics of gender, age, and years of experience can impact both JE and CNA retention (Aboul-Ela, 2018; Halfer, 2011 Reitz, 2014b; Reitz & Anderson, 2011; Wiener et al., 2009). For this reason, understanding the relationship between JE and CNA retention for certain demographics will assist SNF leadership in understanding how certain aspects of JE will influence facilities based on the demographic concentrations within individual facilities. Again, the JE data were compiled, processed, and standardized prior to IBM SPSS analysis. In addition, demographic data were processed through Microsoft Excel to establish frequency percentages. Once both

variables were prepared, the relationship between the aggregate JE score and the dependent

variable of CNA retention was examined with the moderating variables using IBM SPSS.

**Hypothesis 3.** The independent variable of JE was broken down into its 6 subcomponents

to create multiple independent variables and answer the research question and examine

Hypothesis 3 (Mitchell et al., 2001). In order to prepare data, the scores for each subcomponent

were compiled and standardized. The relationship between the prepared independent variable of

the JE subcomponent scores and the dependent variable of CNA retention were examined using

IBM SPSS statistical software.

This hypothesis allowed the researcher to examine the relationship between retention and

the six subcomponents. Previous research by Lee et al. (2014) supports the importance of

studying the different subcomponents as research has identified different relationships across

various samples of populations. By identifying which subcomponents have a significant

relationship to CNA retention, SNF leadership can focus their HRM practices toward those areas

that are important to their staff.

**Summary of data analysis.** Data analysis was completed using IBM SPSS statistical

software and the independent variable of JE aggregate score and the independent variable of the

scores for the six subcomponents of the JE instrument were considered. The dependent variable

of CNA retention was collected through self-reported intent to stay data. For each of the

hypotheses, the variables were compared through binary logistic regression (Ranganathan,

Pramesh, & Aggarwal, 2017).

**Reliability and Validity**

No study or instrument provides the perfect measure of a concept. However, researchers

utilize the measurements of reliability and validity to help assess the rigor of a study. In

quantitative research, reliability is used to measure the consistency of an assessment and validity examines the extent to which a concept is measured accurately (Heale & Twycross, 2015). The following section assesses the reliability and validity of this study and the job embeddedness instrument that is being utilized.

**Reliability.** The reliability measurement provides an assessment of the proportion of the variability that is related to random variability rather than to error (Roberts, Priest, & Traynor, 2006). It is assessed using Cronbach's alpha, which was developed to measure the consistency of a test. The internal consistency of the test is measured on a scale between 0 and 1, with 1 providing the highest and most consistent Cronbach's alpha (Tavakol & Dennick, 2011). The initial reliability of the JE instrument was established by the instrument creators, Mitchell et al. (2001) who found a Cronbach's alpha of .87 for hospital workers. The validity was again tested by Holtom and O'Neill (2004) with a stronger value found of .89.

More recent studies have also examined the reliability of the JE instrument specifically related to nurse retention. A study designed to assess the JE of nurses in public hospitals found the alpha to be .83 (Karatepe & Avci, 2019). In another study that was designed to look at the JE of RNs working in the SNF setting, the Cronbach's alpha was higher at .836 (Reitz, 2014). Reitz et al. (2010) found an even higher reliability of .91 when using the instrument to assess RN turnover in relation to urban versus rural locations. The results reported above support the reliability as defined by Tavakol and Dennick (2011) who determined that the alpha score must be over .70 to be considered statistically reliable.

For this study, reliability of the JE instrument was assessed using IBM SPSS statistical software to establish the Cronbach's alpha of .915. Since this is a cross-sectional study, retention was measured through the collection of self-reported intent to stay. Participants reported their

intent to stay by answering two different survey questions related to their likelihood to still work for their current facility in one year. To assess the reliability of this retention measure, these questions were placed in different sections and on different pages of the survey (Reitz, 2014b).

**Validity.** The validity of a survey is the strength of the conclusions established by the survey. The validity was originally confirmed by the creators of the study, Mitchell et al. (2001). These researchers examined the convergent and discriminant validity of the subcomponents of the JE instrument. Their findings confirmed the validity of all three subcomponents and established that the Fit component provided the strongest validity. Reitz (2014b) also established predictive validity of the JE instrument by finding that the more embedded an RN was, the more likely they were to remain with their current job.

There can be threats to both the internal and external validity of a survey. First, internal validity can be threatened by experimental procedures. This researcher reduced this threat by administering the same survey to the same participants during the same 21-day time frame. Second, external validity can be threatened when a researcher attempts to draw incorrect inferences from the data to other persons or settings. This researcher reduced this threat by requiring that the participants affirm that they meet the study qualifications prior to beginning the survey. This allowed the researcher to generalize findings to the larger population of CNAs (Creswell, 2014).

**Summary of reliability and validity.** Reliability, or consistency, of the JE instrument has been established through several studies, including studies conducted in other areas of the health care industry. Cronbach's alpha was calculated using SPSS to confirm reliability for this study. The validity, or the strength of the conclusions established, has been confirmed by the

developers of the survey instrument and in subsequent studies. Study procedures were consistent and the participants' eligibility was confirmed to avoid threats to validity.

**Transition and Summary of Section 2**

Section 2 explained the research method and design for this study. This section reviewed the role of the researcher, the research methods and design, the population and sampling, data collection and analysis, and the reliability and validity of the survey and the survey instrument. This study employed a quantitative, correlational research design. A web-based survey tool was utilized to collect survey data from a sample of over 1,200 CNA participants. Data were prepared prior to analysis utilizing IBM SPSS statistical software. The following section, Section 3, presents the findings from data analysis, provide applications to professional practice and provide recommendations for action and further study. In addition, Section 3 provides study reflections and conclusions.

**Section 3: Application to Professional Practice and Implications for Change**

Section 3 provides an overview of the study, the presentation of the findings, recommendations for action, and a personal reflection of the study. The presentation of the findings discusses the tests performed and conclusions drawn for each of the three hypotheses. In addition, this section discusses all collected data and evidence, relate findings to the literature, and discuss any outstanding discrepancies. Recommendations for action provide the recommendations that flow from the study conclusions and explain who might be impacted by the results from this study. Recommendations for further study point out any areas or topics related to this study that might be examined to further improve practice in business. And finally, the personal reflections section share the researcher's experience and provide personal biases and any changes in the researcher's thinking that occurred from the results of the study.

**Overview of the Study**

This study was designed to examine the relationship between JE and CNA retention. Despite years of research into why CNAs turnover, the relationship between JE, or why people stay, and CNA retention had previously not been considered. The intention behind this study was to identify why CNAs stay in their role so that SNF leaders can make more informed HRM decisions and policies for this population.

A quantitative, correlational study was employed and three research questions were considered. The central research question was: Is there a relationship between JE and CNA retention in the SNF industry? The second research question was: Is there a relationship between JE and CNA retention in the SNF industry for specific demographics? The final research question was: Is there a relationship between the subcomponents within the JE instrument and CNA retention in the SNF industry?

The findings suggest that there is a significant relationship between JE and CNA retention in SNFs, particularly for the overall score and for the subcomponents of the instrument. These findings are similar to those reported in related research that examined the relationship between JE and nurse retention (Reitz, 2014a; Reitz, 2014b). Additionally, the findings related to demographics have been both supported and disputed by other research. Reitz and Anderson (2011) found that gender was not a moderating factor in relation to JE of nurses in certain markets. However, Reitz et al. (2010) determined that age was a significant factor related to JE and retention in nurses. In this study, neither gender nor age was found to be significant. However, the study did establish a relationship between JE score and retention for CNA. As previous research had not applied JE to the CNA field, this study closes the gap related to the significance of JE for this occupation.

**Presentation of the Findings**

The presentation of the findings provides a description of the survey process and the response rate. Demographic information of the participants is also reviewed and presented in table format. In addition, hypotheses testing is described in relation to the research questions. Data analysis will be discussed for each of the three hypotheses.

**Description of response rate.** Recruitment letters with the survey information were provided to the administrator of each of the 41 qualifying centers within the SNF chain. Administrators disseminated this information to staff with a focus on their full-time CNAs. During the time of the survey, there were 1,291 full-time CNAs employed by the selected centers (R. Sowers, email communication, February 27, 2020). Initial questions were used to eliminate any participants that did not meet the qualifying conditions of being CNAs over the age of 18 that are employed full-time by the research site. In addition, any survey that was incomplete was

removed from the study. The result was 415 survey responses, or a response rate of 32.1%. Of

the 415 surveyed participants, 91.3% reported an intent to stay employed by the research site.

The intent to stay variable collected in this study appears to be high as the actual CNA turnover

for the research site is currently around 90%. The discrepancy between the reported intent to stay

and the current turnover rate is discussed in the section on recommendations for further research.

**Demographic data.** Participant characteristics were requested as part of the survey.

Demographic information related to gender, age, years as a CNA, and years employed by the

research site was collected. In addition, data were collected related to the facility where the

participant worked. This information included whether the facility was rural or urban and the

facility size. This information has been displayed below in Tables 3 through 8.

Table 3

*Distribution of Demographic Variable: Gender*

| Gender | Frequency | Relative Frequency |
| --- | --- | --- |
| Male | 28 | 7% |
| Female | 387 | 93% |
| TOTAL | 415 | |

Table 3 shows that the majority of the survey participants were female. At 93% female,

the gender distribution is representative of national data that show 90% of CNAs are female

(PHI, 2015). The gender demographic findings are also representative of the overall population

of full-time CNAs employed by the research site.

Table 4

*Distribution of Demographic Variable: Age*

| Age | Frequency | Relative Frequency |
|---|---|---|
| 18-25 | 117 | 28% |
| 26-35 | 124 | 30% |
| 36-45 | 73 | 18% |
| 46-55 | 57 | 14% |
| 56-65 | 38 | 9% |
| >66 | 6 | 1% |
| TOTAL | 415 | |

Table 4 shows that 76% of the study participants are under the age of 45. Also, the median age for CNAs participants was 33 years of age. National demographics for CNAs indicate that the majority of CNAs are under 45 and that the median age is 36 (PHI, 2015). In addition to being representative of CNA population as a whole, the age demographics collected in this study are also representative of the overall group of CNAs employed by the research site.

Table 5

*Distribution of Demographic Variable: Years as CNA*

| Years | Frequency | Relative Frequency |
|---|---|---|
| <1 | 51 | 12% |
| 1-5 | 141 | 34% |
| 6-10 | 78 | 19% |
| 11-15 | 39 | 9% |
| 16-20 | 40 | 10% |
| >21 | 66 | 16% |
| TOTAL | 415 | |

Table 6

*Distribution of Demographic Variable: Company Tenure*

| Years | Frequency | Relative Frequency |
|-------|-----------|--------------------|
| <1    | 119       | 29%                |
| 1-5   | 189       | 46%                |
| 6-10  | 36        | 9%                 |
| 11-15 | 24        | 6%                 |
| 16-20 | 20        | 5%                 |
| >21   | 27        | 6%                 |
| TOTAL | 415       |                    |

Tables 5 and 6 provide information about the experience level and tenure of the CNA study participants. Table 5 shows that more than half, or 54%, of the study participants have been CNAs for longer than five years. Comparatively, Table 6 shows that only 26% of the CNA study participants have been employed by the study site for greater than 5 years. These findings indicate that the majority of the participants are experienced CNAs and have worked for other organizations prior to employment with research site.

Table 7

*Distribution of Demographic Variable: Location*

| Location | Frequency | Relative Frequency |
|----------|-----------|--------------------|
| Urban    | 188       | 45%                |
| Rural    | 227       | 55%                |
| TOTAL    | 415       |                    |

Table 8

*Distribution of Demographic Variable: Facility Size*

| Size | Frequency | Relative Frequency | Actual Facility Distribution |
|------|-----------|--------------------|------------------------------|
| 60 | 34 | 8% | 8% |
| 90 | 61 | 15% | 23% |
| 120 | 154 | 37% | 45% |
| 180 | 127 | 31% | 21% |
| 240 | 39 | 9% | 3% |
| TOTAL | 415 | | |

Tables 7 and 8 provide facility specific information used to determine if the participants provide a representative sample of the research site. Of the surveyed facilities, 22 or 54% of them meet the study criteria for rural centers. Table 7 shows that the participants were similarly distributed between urban and rural centers. Table 8 shows the distribution of bed size reported by participants as well as actual distribution of size for the facilities polled within the research site. The participant distribution is representative of the organization for 60 bed facilities but is slightly skewed in the other center sizes. As a result, the table shows that there was a disproportionately larger representation of participants from the larger, 180 and 240 bed centers compared to those in the smaller 90 and 120 bed centers.

**Demographic summary.** The data collected for gender, age, and years of experience were used to answer Research Question 2. Additionally, demographics were collected to ensure that the study findings were representative of the CNA population at the research site and nationwide Results show that the majority of the study participants were young females with greater than five years of experience as a CNA. Overall findings indicate a representative sample and strengthen the validity and the applicability of the findings.

**Hypothesis testing.** Data collected by the JE instrument was standardized by finding the z-score for responses. Each participant's final JE was determined by averaging the standardized responses for each of the six individual subcomponents, then averaging across all three components to find two dimensions, and finally averaging again across the two main dimensions to create a mean of means (T. Lee, personal communication, February 19, 2020).

Data analysis was competed using IBM SPSS. Since the dependent variable, intent to stay, was measured through categorical yes/no data, a binomial logistic regression was selected (Hosmer, Limeshow, & Sturdivant, 2013). Prior to completing binomial logistic regression, the Box-Tidwell approach was used to ensure that there was a linear relationship between the continuous independent variables and the logit transformation of the dependent variable. A Bonferroni correction was applied using all eight terms in the model with a statistic significance being accepted when $p < .00625$ (Tabachnick & Fidell, 2014). Table 9 shows that the independent variables were found to be linearly related to the logit of the dependent variable indicating that the data meets the criteria for logistic regression.

Table 9

*Box-Tidwell Test for Linearity*

| | | B | S.E. | Wald | df | Sig. | Exp(B) | 95% C.I.for EXP(B) Lower | Upper |
|---|---|---|---|---|---|---|---|---|---|
| Step 1ª | Gender(1) | 17.459 | 11751.211 | .000 | 1 | .999 | 38221126.521 | .000 | . |
| | Age | -.674 | 2.284 | .087 | 1 | .768 | .510 | .006 | 44.801 |
| | TimeAsCNA | .423 | .899 | .221 | 1 | .638 | 1.526 | .262 | 8.880 |
| | JEScore | 22.801 | 22.433 | 1.033 | 1 | .309 | 7983229699.905 | .000 | 9.944E+28 |
| | Age by ln_Age | .150 | .514 | .086 | 1 | .770 | 1.162 | .424 | 3.184 |
| | TimeAsCNA by ln_TimeAsCNA | -.083 | .296 | .079 | 1 | .779 | .920 | .515 | 1.644 |
| | JEScore by ln_JEScore | 16.945 | 20.299 | .697 | 1 | .404 | 22867056.428 | .000 | 4.34E+24 |
| | Constant | 7.942 | 15.730 | .255 | 1 | .614 | 2814.045 | | |

a. Variable(s) entered on step 1: Gender, Age, TimeAsCNA, JEScore, Age * ln_Age , TimeAsCNA * ln_TimeAsCNA , JEScore * ln_JEScore .

**Hypothesis 1.** Hypothesis 1 focuses on the relationship between JE and CNA retention.

$H_{01}$: There is not a statistically significant relationship between JE and CNA retention in one for-profit SNF chain.

$H_{A1}$: There is a statistically significant relationship between JE and CNA retention in one for-profit SNF chain.

The hypothesis for the relationship between JE and CNA retention was measured using binomial logistical regression. The 415 responses were used to ascertain the effects of independent variable, JE, on the dependent variable, likelihood of the participants' intention to stay. The

logistic regression model was statistically significant, $X^2 = 40.396$, $p < .0005$. The model

explained 20.8% (Nagelkerke $R^2$) of the variance in intent to stay and correctly classified 90.4%

of cases. Sensitivity was 98.7% and specificity was 2.8%. The positive predictive value was

found to be 91.4% and the negative predictive value was 16.6%. As shown in the Wald test result

depicted in Table 10, the mean JE score was statistically significant and the odds of having intent

to stay is 9.033 times greater for each increase in one unit of the JE score. Since the results are

statistically significant, the null hypothesis is rejected.

Table 10

*Logistic Regression Predicting Likelihood of Intent to Stay Based on JE Score*

|  |  | B | S.E. | Wald | df | Sig. | Exp(B) | 95% C.I.for EXP(B) | |
|---|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  | Lower | Upper |
| Step 1[a] | JEScore | 2.201 | .381 | 33.366 | 1 | .000 | 9.033 | 4.281 | 19.062 |
|  | Constant | 2.783 | .230 | 146.527 | 1 | .000 | 16.169 |  |  |

*a. Variable(s) entered on step 1: JEScore*

**Hypothesis 2.** Hypothesis 2 focuses on the moderating effects of gender, age, and years

as a CNA on the relationship between JE and CNA retention.

H$_{02}$: There is not a statistically significant relationship between JE and CNA retention in

one for-profit SNF chain for certain demographics.

H$_{A2}$: There is a statistically significant relationship between JE and CNA retention in one

for-profit SNF chain for certain demographics.

The hypothesis for the relationship between JE and CNA retention for certain demographics was

measured using binomial logistical regression with interaction terms representing the

demographic variables. The 415 responses were used to ascertain the effects of the independent

variable, JE, based on gender, age, and years as a CNA on the likelihood of the dependent variable, participants' intention to stay. The logistic regression model was statistically significant, $X^2 = 86.354$, $p < .0005$. The model explained 42.2% (Nagelkerke $R^2$) of the variance in intent to stay and correctly classified 93% of cases. Sensitivity was 98.9% and specificity was 30.6%. The positive predictive value was found to be 93.7% and the negative predictive value was 73.3%. As shown in the Wald test result depicted in Table 11, none of the moderating demographic variables were statistically significant. Since the results are not statistically significant, the study fails to reject the null hypothesis.

Table 11

*Logistic Regression Predicting Likelihood of Intent to Stay based on JE Score with Moderators*

| | B | S.E. | Wald | df | Sig. | Exp(B) | 95% C.I.for EXP(B) Lower | Upper |
|---|---|---|---|---|---|---|---|---|
| Step 1ᵃ Gender(1) | 363.340 | 19135.040 | .000 | 1 | .985 | 6.258E+157 | .000 | . |
| Age | .014 | .032 | .200 | 1 | .655 | 1.014 | .953 | 1.080 |
| TimeAsCNA | .149 | .071 | 4.459 | 1 | .035 | 1.161 | 1.011 | 1.333 |
| JEScore | 4.376 | 1.474 | 8.818 | 1 | .003 | 79.558 | 4.428 | 1429.540 |
| Gender(1) by JEScore | 444.381 | 23249.517 | .000 | 1 | .985 | 9.818E+192 | .000 | . |
| Age by JEScore | -.041 | .046 | .781 | 1 | .377 | .960 | .877 | 1.051 |
| TimeAsCNA by JEScore | -.055 | .101 | .291 | 1 | .590 | .947 | .777 | 1.154 |
| Constant | 1.645 | .877 | 3.521 | 1 | .061 | 5.180 | | |

a. Variable(s) entered on step 1: Gender, Age, TimeAsCNA, JEScore, Gender * JEScore , Age * JEScore , TimeAsCNA * JEScore.

**Hypothesis 3.** Hypothesis 3 focuses on the relationship between the six factors within the JE construct and CNA retention.

$H_{03}$: There is not a statistically significant relationship between JE and CNA retention in one for-profit SNF chain for the subcomponents of the JE instrument.

$H_{A3}$: There is a statistically significant relationship between JE and CNA retention in one for-profit SNF chain for the subcomponents of the JE instrument.

The hypothesis for the relationship between the six subcomponents of JE and CNA retention was measured using binomial logistical regression. The 415 responses were used to ascertain the effects of the independent variables, the six subcomponents of the JE instrument, on the dependent variable, likelihood of the participants' intention to stay. The logistic regression model was statistically significant, $X^2 = 95.640 \ p < .0005$. The model explained 46.2% (Nagelkerke $R^2$) of the variance in intent to stay and correctly classified 92.8% of cases. Sensitivity was 98.2% and specificity was 36.1%. The positive predictive value was found to be 94.1% and the negative predictive value was 65%. The Wald test for the 6 JE subcomponents are displayed in Table 12. Fit-Community, Links-Organization, Sacrifice-Community, and Sacrifice-Organization are all significant. The odds of reporting intent to stay is 2.83 times greater for each unit reduction of the Fit-Community score, 26.84 times greater for each increase in one unit of the Links-Organization score, 2.257 times greater for each increase in one unit of the Sacrifice-Community score, and 6.639 times greater for each increase in one unit of the Sacrifice-Organization score.

Since the results are statistically significant, the null hypothesis is rejected.

Table 12

*Logistic Regression Predicting Likelihood of Intent to Stay based on JE Subcomponents*

| | | B | S.E. | Wald | df | Sig. | Exp(B) | 95% C.I.for EXP(B) Lower | Upper |
|---|---|---|---|---|---|---|---|---|---|
| Step 1ᵃ | FitCommunity | -1.040 | .387 | 7.214 | 1 | .007 | .353 | .165 | .755 |
| | FitOrganization | .283 | .347 | .666 | 1 | .414 | 1.328 | .672 | 2.621 |
| | LinksCommunity | -.708 | .494 | 2.049 | 1 | .152 | .493 | .187 | 1.299 |
| | LinksOrganization | 3.290 | .836 | 15.477 | 1 | .000 | 26.843 | 5.212 | 138.253 |
| | SacrificeCommunity | .814 | .350 | 5.401 | 1 | .020 | 2.257 | 1.136 | 4.486 |
| | SacrificeOrganization | 1.893 | .425 | 19.879 | 1 | .000 | 6.639 | 2.889 | 15.258 |
| | Constant | 4.249 | .494 | 74.028 | 1 | .000 | 70.059 | | |

a. Variable(s) entered on step 1: FitCommunity, FitOrganization, LinksCommunity, LinksOrganization, SacrificeCommunity, SacrificeOrganization.

**Relationship of hypotheses to research questions.** Each of the hypotheses examined directly corresponded to one of the three research questions. The research questions examined the relationship between JE and CNA retention. The central research question, Research Question 1, considered this relationship directly. This question asks "Is there a relationship between JE and CNA retention in the SNF industry?" The logistic regression model correctly classified 90.4% of cases. The independent variable of mean JE score was statistically significant at $p < .000$. Findings show that the odds of positive intent to stay is 9.033 times greater for each increase in one unit of the JE score. Based on the findings, the null hypothesis "There is not a statistically significant relationship between JE and CNA retention in one for-profit SNF chain" was rejected indicating there is a relationship between JE score and CNA retention.

Research Question 2 considers the relationship between JE and CNA retention for certain demographics. This question asks "Is there a relationship between JE and CNA retention in the SNF industry for specific demographics?" The logistic regression model correctly classified 93% of cases; however, the moderating demographic variables were not statistically significant. The findings failed to reject the null hypothesis of "There is not a statistically significant relationship between JE and CNA retention in one for-profit SNF chain for certain demographics." For this reason, it was determined that there is not a relationship between JE and CNA retention in the SNF industry for the demographics of gender, age, and years as a CNA.

Although many studies have shown the significance of these demographic variables on JE in other occupations (Aboul-Ela, 2018; Ng & Feldman, 2012 Reitz et al., 2010), they did not have a statistical significance on the model for the relationship between JE and CNA retention. Post hoc analysis was conducted to examine the relationship between the three demographic variables and intent to stay. Displayed in Table 13 the analysis showed statistically significant findings for the demographic of years as a CNA ($p < .003$). This finding is supported by prior research that shown a relationship between CNA experience and retention (Dill et al., 2012). Additional research into the relationship between years as a CNA and JE score should be conducted.

Table 13

*Logistic Regression Predicting Likelihood of Intent to Stay Based on Demographics*

| | | B | S.E. | Wald | df | Sig. | Exp(B) | 95% C.I.for EXP(B) Lower | Upper |
|---|---|---|---|---|---|---|---|---|---|
| Step 1[a] | Gender(1) | 1.105 | 1.048 | 1.111 | 1 | .292 | 3.020 | .387 | 23.579 |
| | Age | .023 | .023 | .990 | 1 | .320 | 1.023 | .978 | 1.070 |
| | TimeAsCNA | .160 | .054 | 8.915 | 1 | .003 | 1.173 | 1.056 | 1.303 |
| | Constant | .748 | .607 | 1.518 | 1 | .218 | 2.112 | | |

a. Variable(s) entered on step 1: Gender, Age, TimeAsCNA.

Research Question 3 considers the relationship between the 6 components of the JE instrument and CNA retention. This question asks "Is there a relationship between the subcomponents within JE and CNA retention in the SNF industry?" The logistic regression model correctly classified 92.8% of cases and four of the six components were statistically significant. The independent variable of Fit-Community score was statistically significant at $p <$ .007 with each unit reduction in the score increasing the odds of intent to stay by a factor of 2.83. Links-Organization score was statistically significant at $p <$ .000 with the likelihood of positive intent to say being 26.843 times higher for each increase in one unit of the score. Sacrifice-Community score was also statistically significant at $p <$ .002 and findings indicated the odds of intent to stay was 2.257 times greater for each one unit increase in the Sacrifice-Community score. Finally, Sacrifice-Organization was significant at $p <$ .000 and odds of positive intent to stay was 6.639 times greater for each one unit increase in this score. Fit-Organization and Links-Community were not found to have a statistically significant relationship to intent to stay. Based on the findings, the null hypothesis "There is not a statistically significant relationship between

JE and CNA retention in one for-profit SNF chain for the subcomponents of the JE instrument"

was rejected indicating there is a relationship between the JE subcomponent scores and CNA

retention.

 Post hoc analysis was conducted to provide further relevant findings to expand upon

Research Question 3. The analysis examined the relationship between intent to stay and each of

the question items within the statistically significant JE subcomponents. Tables 14 through 17

display the results for the question items within these subcomponents. Identifying the questions

that have a statistically significant relationship to intent to stay adds to the recommendations for

action section that will be provided to SNF leadership.

Table 14

*Logistic Regression Predicting Likelihood of Intent to Stay Based on Fit-Community*

|  |  | B | S.E. | Wald | df | Sig. | Exp(B) | 95% C.I.for EXP(B) | |
|---|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  | Lower | Upper |
| Step 1[a] | Q5FC | -.103 | .236 | .189 | 1 | .664 | .903 | .568 | 1.433 |
|  | Q6FC | -.405 | .227 | 3.189 | 1 | .074 | .667 | .428 | 1.040 |
|  | Q7FC | .526 | .264 | 3.962 | 1 | .047 | 1.693 | 1.008 | 2.842 |
|  | Q8FC | .238 | .233 | 1.045 | 1 | .307 | 1.269 | .804 | 2.002 |
|  | Q9FC | -.087 | .212 | .167 | 1 | .683 | .917 | .605 | 1.389 |
|  | Constant | 2.461 | .188 | 170.800 | 1 | .000 | 11.720 |  |  |

a. Variable(s) entered on step 1: Q5FC, Q6FC, Q7FC, Q8FC, Q9FC.

 Table 14 shows that one of the questions within the Fit-Community subcomponent was

statistically significant. Question 7 asked respondents to answer the following on a Likert scale:

this community is a good match for me. Questions that did not provide a statistically significant

response included: I love the place where I live, the weather is suitable for me, I think of the

community where I live as a home, and the area where I live provides the leisure activities that I

like.

Table 15

*Logistic Regression Predicting Likelihood of Intent to Stay Based on Links-Organization*

| | | B | S.E. | Wald | df | Sig. | Exp(B) | 95% C.I.for EXP(B) | |
| | | | | | | | | Lower | Upper |
|---|---|---|---|---|---|---|---|---|---|
| Step 1ᵃ | Q25LO | .686 | .533 | 1.658 | 1 | .198 | 1.987 | .699 | 5.647 |
| | Q26LO | .259 | .665 | .151 | 1 | .697 | 1.295 | .352 | 4.767 |
| | Q27LO | .825 | .453 | 3.318 | 1 | .069 | 2.283 | .939 | 5.547 |
| | Q28LO | 1.336 | .546 | 5.977 | 1 | .014 | 3.803 | 1.303 | 11.099 |
| | Q29LO | -1.015 | .300 | 11.438 | 1 | .001 | .363 | .201 | .653 |
| | Q30LO | 1.105 | .429 | 6.652 | 1 | .010 | 3.020 | 1.304 | 6.995 |
| | Q31LO | -.185 | .251 | .546 | 1 | .460 | .831 | .508 | 1.358 |
| | Constant | 3.425 | .398 | 74.220 | 1 | .000 | 30.724 | | |

a. Variable(s) entered on step 1: Q25LO, Q26LO, Q27LO, Q28LO, Q29LO, Q30LO, Q31LO.

Table 15 shows that questions 28, 29 and 30 were statistically significant with only

question 29 showing a negative relationship. Question 28, 29, and 30 are fill in the blank

questions that ask the respondent: how many coworkers do you interact with regularly, how

many coworkers depend highly on you, and how many teams are you on? The questions that did

not provide a significant result were length of time in current position, length of time you have

worked for the company, length of the time in the industry, and number of committees the

respondent is on.

Table 16

*Logistic Regression Predicting Likelihood of Intent to Stay Based on Sacrifice-Community*

| | | B | S.E. | Wald | df | Sig. | Exp(B) | 95% C.I.for EXP(B) Lower | Upper |
|---|---|---|---|---|---|---|---|---|---|
| Step 1[a] | Q32SC | .608 | .194 | 9.838 | 1 | .002 | 1.837 | 1.256 | 2.686 |
| | Q33SC | .464 | .185 | 6.280 | 1 | .012 | 1.591 | 1.106 | 2.287 |
| | Q34SC | -.005 | .176 | .001 | 1 | .976 | .995 | .705 | 1.404 |
| | Constant | 2.723 | .226 | 145.581 | 1 | .000 | 15.222 | | |

a. Variable(s) entered on step 1: Q32SC, Q33SC, Q34SC.

Table 16 shows that questions 32 and 33 from the Sacrifice-Community subcomponent were statistically significant. Question 32 asks the respondent to answer the following on a Likert scale: leaving this community would be very hard. Question 33 also asks for a Likert scale response to: people respect me in my community. One Likert-scale question was not significant: my neighborhood is safe.

Table 17

*Logistic Regression Predicting Likelihood of Intent to Stay Based on Sacrifice-Organization*

| | | B | S.E. | Wald | df | Sig. | Exp(B) | 95% C.I.for EXP(B) Lower | Upper |
|---|---|---|---|---|---|---|---|---|---|
| Step 1[a] | Q35SO | -.209 | .289 | .521 | 1 | .470 | .812 | .460 | 1.431 |
| | Q36SO | -.341 | .342 | .992 | 1 | .319 | .711 | .364 | 1.391 |
| | Q37SO | .631 | .232 | 7.385 | 1 | .007 | 1.880 | 1.192 | 2.963 |
| | Q38SO | .406 | .286 | 2.014 | 1 | .156 | 1.501 | .857 | 2.629 |
| | Q39SO | .075 | .360 | .044 | 1 | .835 | 1.078 | .533 | 2.182 |
| | Q40SO | -.080 | .278 | .083 | 1 | .774 | .923 | .535 | 1.593 |
| | Q41SO | .336 | .369 | .828 | 1 | .363 | 1.399 | .679 | 2.883 |
| | Q42SO | -.189 | .374 | .256 | 1 | .613 | .828 | .398 | 1.722 |
| | Q43SO | -.516 | .319 | 2.625 | 1 | .105 | .597 | .320 | 1.114 |
| | Q44SO | 1.499 | .330 | 20.702 | 1 | .000 | 4.479 | 2.348 | 8.546 |
| | Constant | 3.536 | .343 | 106.409 | 1 | .000 | 34.340 | | |

a. Variable(s) entered on step 1: Q35SO, Q36SO, Q37SO, Q38SO, Q39SO, Q40SO, Q41SO, Q42SO, Q43SO, Q44SO

Table 17 shows that questions 37 and 44 from the Sacrifice-Organization subcomponent were statistically significant. Questions 37 and 44 ask the participant to respond on a Likert scale to the statements: I feel that people at work respect me and the prospects for continuing my employment are excellent. Those questions that were not significant include: I have a lot of freedom on this job to decide how I pursue my goals, the perks of this job are outstanding, 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, the benefits at this job are good, the healthcare

benefits provided by my organization are excellent, and the retirement benefits provided by my

organization are excellent.

**Summary of the findings.** There are several key findings from this study that are

significant to the research site as well as to the SNF industry as a whole. First, the study

identified an overall correlation between the JE construct and CNA retention. Second, even

though previous research has shown that the demographics of gender, age, and years as a CNA is

significant to retention, these demographics were not found to be moderating variables for the

relationship between JE and CNA retention. These findings indicate that the demographics of a

CNA does not change the relationship between JE score and CNA intent to stay; however, post

hoc analysis shows that years as a CNA does have a relationship with JE score. Finally, the

findings did show a significant relationship between four of the six components of the JE

construct and CNA retention. Increases in Links-Organization and Sacrifice-Organization scores

lead to the highest increases in the odds of positive intent to stay response. These findings

indicate that the employer has opportunities to increase CNA retention by focusing on the items

within these subcomponents that are statistically significant and within their control. The

findings related to Research Question 3 also indicate that although a CNA's intent to stay is

influenced by community factors, SNF employers continue to have the ability to influence

retention as organizational factors play a more significant role.

**Applications to Professional Practice**

The research conducted was designed to add to the body of knowledge on the effect of JE

on CNA retention in SNFs. The study examined the relationship between JE and CNA retention

in the SNF industry. The JE score was computed using the JE instrument that was designed by

Mitchell et al. (2001). This instrument examines an individual's intent to stay based on scores

within six subcomponents that are used to determine the dimensions of on- and off-the-job

embeddedness. The dependent variable of retention was determined through participants' self-

reported intent to stay. Participants were full-time CNAs over the age of 18 that were employed

by one for-profit SNF chain. Previous research has shown that there is a correlation between JE

and retention for other health care professionals including nurses that are employed in SNFs

(Reitz, 2014b). The researcher wanted to test to see if similar findings would be identified within

the CNA occupation.

      **Improved business practice.** By answering the central research question, this research

concluded that there is a statistically significant relationship between JE and CNA retention.

These findings were anticipated as prior research has applied JE to numerous occupations

including health care workers within the SNF industry. Additional research questions within the

study allowed the researcher to identify the areas of focus found in the JE instrument that are

important to the retention of CNAs in SNFs. The study indicated that Fit-Community, Links-

Organization, Sacrifice-Community, and Sacrifice-Organization all have a statistically

significant relationship to intent to stay.

      Understanding this correlation will allow SNF leaders to better direct their efforts and

HRM resources to retain CNAs. Practice opportunities include fostering teamwork and respect

for the CNA position, raising community respect of the facility, investing in CNA career

development, and increasing community ties. By implementing these opportunities, SNF leaders

can impact their CNA turnover rate to improve quality of care and reduce turnover expense.

      **Biblical application.** Like the two dimensions of the JE construct, on-the-job

(organizational) and off-the-job (community), God's purpose for work on earth focuses on both

organizational and community elements. Humans were built to work and the organization that

employs them fulfills a basic human need (Keller & Alsdorf, 2012). In addition, God has

provided individuals with the talents and skills needed to improve their communities (Van

Duzer, 2010). As employers, we have an obligation to understand how our organization and our

surrounding community meets the needs of our staff. Through this study, the importance of

various elements of the JE construct on the retention of CNAs was examined. SNF employers

can use this information to increase JE and improve retention. Through conscious efforts to

improve JE, employers increase opportunities for staff fulfillment. In addition, increased

retention results in continuity and higher quality of health care services available to the

community (Dabney & Kalisch, 2015).

   **Field of study.** The relevance of JE in the overall health care industry has been supported

in previous research. However, there has been limited research on the impact of JE on the SNF

sector of health care. As the population in the United States continues to age, the demand for

SNF services will continue to increase and will raise the need to ensure that staff members are

retained. Nearly 1.5 million people reside and receive health care services in SNFs (Howley,

2019). CNAs provide 80 percent of the direct care received by SNF residents (Castle, 2010).

This study has helped to close the gap on the reasons why CNAs stay with their organizations

and the findings will allow SNF leaders to focus their retention and HRM efforts to better retain

staff.

**Recommendations for Action**

   The purpose of this study was to identify connections between factors within the JE

construct and retention of CNAs in order to allow SNF leaders to make more informed decisions

surrounding HRM practices and to improve upon the business problem of CNA turnover. The

study indicates that there is a relationship between JE and CNA retention and that there are

specific subcomponents and items within the construct that impact retention. The following

section will include recommendations, steps to implement recommendations, who will be

impacted by the results of this study, and how these results can be shared.

This study established a relationship between the JE construct and CNA retention.

Further analysis revealed that certain items within the construct had a statistically significant

relationship to CNA intent to stay. These results can be applied to the HRM practices of SNF

leaders. Focus should be placed on fostering teamwork, commitment to respect, building a career

ladder, and establishing community ties and services.

**Teamwork.** Multiple JE construct items that were significant in this study involved

working closely with others at work and being a part of a team. One way to increase teamwork

and a sense of belonging is workplace fun. Workplace fun can be encouraged through activities

to facilitate coworker interaction and socialization. Examples of formal activities include:

company provided food, celebrating birthdays and personal milestones, parties to recognize

accomplishments, and holiday festivities. However, formal activities are time-consuming and

can take away from the time that a CNA needs to care for their residents. Leadership should be

aware of staff preferences as well. Millennials value more informal activities and managers of

those in this generation should allow for more fun interaction time during day-to-day activities

(Tews, Michel, Xu, & Drost, 2015).

In the survey, many staff members responded that they were on few or no teams with a

mean response of 1.28 teams. Job embeddedness is increased through the feeling of belonging

and connection that is provided by team membership. SNF leaders should find opportunities to

create teams and a team mindset as work environment is improved when CNAs feel they are a

part of a team (Gray et al., 2016). The team mindset can also be increased through friendly unit

or shift competitions and activities. Opportunities include unit decorating competitions, clinical competitions, team spirit events, and health challenges. Also, morale committees and nominating committees for employee recognition awards can be used to increase both a sense of team belonging and to give staff a voice at work.

**Respect.** Organizational respect was an area that was found to be significant to CNA retention in this study. A relationship was found between retention and participants' feelings on both respect at work and respect in the community. Participant responses to the question "people at work respect me" was significant at ($p < .007$) and responses to the question "people in my community respect me" was significant at ($p < .0012$). CNAs provide the bulk of patient care in SNFs, yet they can struggle with their place within the organization, as they see their role as being at the bottom tier of patient care (Jang et al., 2015). It is important that SNF leadership make efforts to foster respect in the workplace and to be an employer of choice in their community.

At work, respect can be shown by involving CNAs in workplace decisions. This can be encouraged by providing staff members with opportunities to voice opinions through committee membership, voting, and staff meetings. CNAs can also be involved in accident prevention, care planning, and room move discussions. Further, facilities can show that they respect and value their CNAs' time by allowing them flexible and self-scheduling.

In addition, it is important that CNAs feel respected and valued by their immediate supervisor and upper management (Berhens & Parmelee, 2018). SNF facilities would be well served to invest in leadership training for their managers. Certain practices should be encouraged including open door policies and engagement in management rounding and small group meetings. Employees seek respect from their coworkers as well. Leadership training should also

include strategies that supervisors can employ to monitor and encourage respect-based

relationships among team members a part of their daily routine (Dechawatanapaisal, 2018). In

the SNF interdisciplinary work environment, it is also important to ensure that respect is given

by and across all disciplines.

CNAs that value respect from their community will benefit from being proud to work at

their facility. SNF leadership can achieve this by focusing on their own reputation as a good

employer and a provider of high-quality service. Community commitment and reputation

development can be fostered by sponsoring local school and sporting events (Ng & Feldman,

2014). SNFs can also be represented in the community at local community events, festivals, and

competitions. In addition, facilities should manage community perception by sharing their

success. Positive marketing can be achieved by publicly sharing facility accomplishments, feel

good stories, and wins on social media (Schivinski & Dabrowski, 2014).

**Career development.** In addition to ensuring that CNAs feel respected, SNF leaders

should also ensure that there are opportunities for growth and development. Meyer et al. (2014)

found that newer CNAs leave the industry because there are too few opportunities for their

advancement. One opportunity to enhance the role and provide an opportunity for growth is

developing CNA mentors to train and guide new CNAs. SNF leadership might also consider

creating promotional opportunities within the CNA role that are based on tenure, education, or

skills development. In addition to enhancement of the CNA role, management should monitor

staff performance to identify those that could be groomed and invested in for career growth roles

(Reitz, 2014b). Tuition reimbursement and scholarships can be provided to CNAs seeking to

further their nursing careers or to begin a role in the business office or other ancillary areas

(Probst, Baek, & Laditka, 2009).

**Community ties and services.** SNF leadership can create community ties by encouraging their staff to volunteer and engage in local activities. Focusing on community involvement can be used to encourage organizational teamwork as well. Facilities should consider creating a team in health walkathons or creating resource gathering initiatives for a shared cause. Leadership can also plan activities for staff that occur outside of the facility (Hopson et al., 2018). Meet-ups at local attractions like parks, activity centers, and sport facilities can introduce CNAs to the entertainment available in their community.

SNF leadership should also use their employer power to establish discounts and group purchasing within their community. Potential options include local restaurants, theaters, and civic centers. Also, childcare is a critical need for staff and a common theme related to community JE (Hopson et al., 2018). Since findings showed the majority of CNAs are young and female, it can be assumed that many are mothers to small children. As a result, relationships and discounts established with local childcare services can create a valuable benefit that encourages embeddedness.

Employers can also invest in community embeddedness by providing their CNAs with the life skills education and support that they need to reduce the stress they feel at home. Married employees are more likely to remain in their communities to avoid the cost of relocating an employed spouse (Feldman et al., 2012). However, just over 30% of the study participants were married. Life skills courses can help with relationship management and financial management that can reduce relationship stress. In addition, life skills courses related to financial management can also assist CNAs with meeting homeownership goals. In this study, only 27% of CNA participants owned the home they live in. However, staff that own their own home are more embedded in their community (Ramesh & Gelfand, 2010).

The research conducted surveyed full-time CNAs employed by one for-profit SNF chain located in two Mid-Atlantic states. The response rate for this survey was high and included 415 participants. The results can be applied to the researched population and generalized to the overall population of CNAs employed by SNFs. The study results will be provided to the research site and published for the use of other SNF organizations. Though this research can be generalized outside of the research site, the for-profit status of the organization and the geographic location of the facilities might restrict the application. As a result, additional research should be conducted to include non-profit SNFs and those located in other geographic locations.

**Recommendations for Further Study**

Although the study findings answered the research questions posed, there are additional areas for study that were also identified. Future opportunities for examination and exploration include utilizing a research site with a different geographic scope, ownership type, or health care setting, revisiting the demographic variables, using the findings to take a qualitative approach, and conducting a longitudinal study. The following section will discuss the areas that need closer examination to continue to add to the body of knowledge on JE and CNA retention.

This study was conducted using participants that are employed by a for-profit SNF chain with facilities located in two states in the Mid-Atlantic area. For this reason, it might be difficult to generalize these results to CNAs that work for non-profit SNFs or those located in other parts of the United States. As a result, opportunities for further examination of the relationship between JE and CNA retention might include increasing the geographic scope by utilizing research sites throughout the United States. In addition, future research could include using a research site that is non-profit or government run. Finally, different health care settings should be considered and compared. In addition to working in SNFs, CNAs are also frequently employed

in home health, hospice, and hospital settings. Comparing how JE impacts retention in these other settings could help leadership to identify strengths and weakness of being a CNA in the SNF setting.

Demographics could also be further examined in another study. First, the sample for this study included only 28 males. Though this is representative of the overall population, this small number makes it difficult to determine the validity of the results. For this reason, an additional study could be completed with a larger participant group to determine if the gender demographic is a significant moderating variable in a larger sample. JE could also be examined as a dependent variable. Although the demographics that were examined, age, gender, and years as a CNA, have been identified as having a significant relationship to JE score in other research, in this study the were not found to be a moderating variable for JE and CNA retention. Future research should examine the relationship between JE and these demographic variables. Findings from such research could be used by SNF leaders to better understand the embeddedness of their CNA population. Years of experience is an important demographic to examine as previous research has indicated that tenure increases JE.

A third opportunity for future research is using the findings from this study to design a qualitative study. A qualitative design could be used to further explore the subcomponents and items of the JE that were found to be significant. The research site could be used again with interviews conducted with participants to explore the phenomena and meanings that CNAs bring to JE.

Finally, this was a cross-sectional study that relied on self-reported data to determine retention. The retention rate that was reported, 91.3%, does not appear to representative of the actual retention rate in the organization as CNA turnover is currently over 90%. The discrepancy

between reported numbers and actual results might indicate that CNAs do not preplan their

departure or that the participants were unwilling to accurately report an intent to leave. To

determine actual retention, a longitudinal study could be used. The study would collect the same

information initially to determine the independent variable of JE score and then use actual

employment of participants in one year to determine the dependent variable of retention.

**Reflections**

This study answered a business problem that is important to the researcher and was

designed to help her and her colleagues as they lead their businesses. This section provides a

reflection on the process that was followed during this study. The researcher also reflects on her

personal biases and the way that this study has impacted her preconceived ideas on the topic.

Finally, the researcher reflects on the biblical principles that were applied during this study.

The researcher embarked on this degree during a busy season of her life. Doctoral

persistence was required to manage the DBA workload around the needs of small children at

home and a demanding career. Throughout the process, the researcher was fueled by a desire to

set an example for her children, to develop a better understanding of God's plan for business, and

to improve the SNF industry.

CNA turnover is a business problem that has become a growing concern in the SNF that

the researcher manages as well as both the parent company that served as the research site and

the overall SNF industry. Having spent her entire professional career as a SNF leader, the

researcher has developed her own preconceived opinions and thoughts on what drives CNA

turnover. The researcher is the administrator for one of the SNFs within the research site.

Although this was a potential form of bias, the researcher did not include CNAs from her own

SNF in the study. Each of the study's participants were voluntary and were recruited by

leadership within the participating facilities. The researcher did not meet or interact with the

participants and did not influence their responses. In addition, the researcher made efforts to not

insert her biases into data analysis and did not seek to draw conclusions that confirmed her

hypotheses or personal assumptions.

Though the study did answer the research questions and resulted in recommendations for

action, the researcher recognizes that the needs and demands of her staff will continue to change.

Even if solutions are found for current circumstances, a commitment to continuous improvement

will be necessary to continue to retain staff. While pursuing this degree, the researcher developed

a new understanding of God's purpose for work on earth. Ultimately, all retention decisions

should be made with the knowledge that individuals have a need to be productive and to improve

to upon their community.

## Summary and Study Conclusions

CNA turnover in SNF facilities is a critical issue in the health care industry. CNAs

provide the majority of the direct care delivered in SNFs. High CNA turnover rates result in

increased costs and lower quality of care. Traditional methods for considering the reason that

CNAs leave their role has been examined for many years, however, the reason that CNAs stay

has yet to be considered. Within many industries, JE has been found to be a more effective way

to examine turnover than traditional measures.

The purpose of this quantitative, correlational research study was to examine the

relationship between JE and CNA retention within the SNF industry. The study was conducted

using participants from one for-profit SNF chain. Participant JE score was collected using the JE

instrument, a six-subcomponent, 40-item survey (Mitchell et al., 2001). Self-reported data was

used to determine the participants intent to stay and to collect demographics. Based on statistical

analysis, the researcher was able to reject null hypotheses 1 and 3. These findings suggest that there is a relationship between JE and CNA retention. The study failed to reject null hypothesis 2, which indicates that the demographics of age, gender, and years as a CNA are not significant moderating variables.

In summary, this study affirmed that there is a significant correlation between JE and CNA retention. The study also examined the relationship between subcomponents and items of the JE instrument and CNA retention. The design of this study allowed the researcher to identify the areas of JE that are significant to CNA intent to stay. This research closes the gap in the body of literature surrounding JE and provides information to help SNF leadership to better address the business problem of CNA turnover.

**References**

Aboul-Ela, G. (2018). Exploring job embeddedness' antecedents. *Journal of Human Resource Management, XXI*(1), 58-78. Retrieved from https://www.jhrm.eu/2018/04/58-exploring-job-embeddedness-antecedents/

Allen, D. (2006). Do organsational socialization tactics influence0 newcomer embeddedness and turnover? *Journal of Management, 32*(2), 237-256. https://doi.org/10.1177%2F0149206305280103

Allen, D., Peltokorpi, V., & Rubenstein, A. (2016). When embedded means "stuck": Moderating effects of job embeddedness in adverse work environments. *Journal of Applied Psychology, 101*(12), 1670-1686. https://psycnet.apa.org/doi/10.1037/apl0000134

Amaratunga, D., Baldry, D., Sarshar, M., & Newton, R. (2002). Quantitative and qualitative research in the built environment: Application of "mixed" research approach. *Work Study, 51*(1), 17-31. doi:10.1109/00438020210415488

American Health Care Association (AHCA). (2014). *American Health Care Association staffing report.* Retrieved from https://www.ahcancal.org/research_data/staffing/documents/2012_staffing_report.pdf

Ampofo, E., Coetzer, A., & Poisat, P. (2017). Relationships between job embeddedness and employees' life satisfaction. *Employee Relations, 39*(7), 951-966. doi:10.1108/ER-10-2016-0199

Anderson, E., & Havaei, F. (2015). Measuring relational care in nursing homes: Psychometric evaluation of the relational care scale. *Journal of Nursing Measurement, 23*(1), 82-95. https://doi.org/10.1891/1061-3749.23.1.82

Anderson, R., Corazzini, K., & McDaniel, R. (2004). Complexity science and the dynamics of climate and communication: Reducing nursing home turnover. *The Gerontologist, 44*(3), 378-388. https://doi.org/10.1093/geront/44.3.378

Aquino, K., Griffeth, R. W., Allen, D. G., & Hom, P. W. (1997). Integrating justice constructs into the turnover processes: A test of a referent cognition model. *Academy of Management Journal, 40*(5), 1208-1227. doi:10.2307/256933

Arasli, H., Teimouri, R., Kilic, H., & Aghaei, I. (2017). Effects of service orientation on job embeddedness in hotel industry. *The Service Industries Journal, 37*(9-10), 607-627. doi:10.1080/02642069.2017.1349756

Arnetz, J., Hamblin, L., Essenmacher, L., Upfal, M., Ager, J., & Luborsky, M. (2015). Understanding patient-to-worker violence in hospitals: A qualitative analysis of documented incident reports. *Journal of Advanced Nursing, 71*(2), 338-348. doi:10.1111/jan.12494

Avey, J., Wu, K., & Holley, E. (2015). The influence of abusive supervision and job embeddedness on citizenship and deviance. *Journal of Business Ethics, 129*, 721-731. doi:10.1007/s10551-014-2192-x

Bambacas, M., & Kulik, T. (2013). Job embeddedness in China: How HR practices impact turnover intentions. *The International Journal of Human Resource Management, 24*(10), 1933-1952. https://doi.org/10.1080/09585192.2012.725074

Banerjee, A., & Chaudhury, S. (2010). Statistics without tears: Populations and samples. *Industrial Psychiatry Journal, 19*(1), 60-65. https://dx.doi.org/10.4103%2F0972-6748.77642

Barbera, E. (2014). The keys to reducing turnover in long term care. *Mcknight's*. Retrieved from

https://www.mcknights.com/the-world-according-to-dr-el/the-keys-to-reducing-turnover-

in-long-term-care/article/33071/

Bartlett, J., Kotrlik, J., & Higgins, C. (2001). Organizational research: Determining appropriate

sample size in survey research. Information Technology, Learning, and Performance

Journal, 19(1), 43-50. Retrieved from

http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.486.8295&rep=rep1&type=pdf

Bazaszak-Holl, J., Castle, N., Lin, L., Shrivastwa, N., & Spreitzer, G. (2015). The role of

organizational culture in retaining nursing workforce. *The Gerontologist, 55*(3), 462-471.

doi:10.1093/geront/gnt129

Becker, T., Atine, G., Breaugh, J., Carlson, K., Edwards, J., & Spector, P. (2015). Statistical

control in correlational studies: Ten essential recommendations for organizational

researchers. *Journal of Organizational Behavior, 37*(2), 157-167. doi:10.10002/job.205.3

Berhens, B., & Parmelee, P. (2018). Perceived supervisor respect, job satisfaction, and word of

mouth recruitment among certified nursing assistants. *Innovation Aging, 2*(1), 677.

doi:10.1093/geroni/igy023.2520

Berridge, C., Tyler, D., & Miller, S. (2018). Staff empowerment practices and CNA retention:

Findings from a nationally representative nursing home culture change survey. *Journal of

Applied Gerontology, 37*(4), 419-434. doi:10.1177/0733464816665204

Best, M., & Thurston, N. (2004). Measuring nursing job satisfaction. *Journal of Nursing

Administration,* 34(6), 283-290. https://doi.org/10.1097/00005110-200406000-00007

Bethell, J., Chu, C., Wodchis, W., Walker, K., Stewart, S., & McGilton, K. (2018). Supportive

 supervision and staff intent to turnover in long-term care homes. *The Gerontologist,*

 *58*(5), 953-959. doi:10.1093/geront/gnx008

Biagioli, V., Prandi, C., Nyatanga, B., & Fida, R. (2018). The role of professional competency in

 influencing job satisfaction and organizational citizenship behavior among palliative care

 nurses. *Journal of Hospice and Palliative Nursing, 20*(4), 377-384.

 doi:10.1097/NJH.0000000000000454

Biggane, J., Allen, D., Amis, J., Fugate, M., & Steinbauer, R. (2017). Cognitive appraisal as a

 mechanism linking negative organizational shocks and intentions to leave. *Journal of*

 *Change Management, 17*(3), 203-227. https://doi.org/10.1080/14697017.2016.1219379

Bishop, C., Squillace, M., Meagher, J., Anderson, W., & Weiner, J. (2009). Nursing home work

 practices and nursing assistants job satisfaction. *The Gerontologist, 49*(5), 611-622.

 doi:10/1093/geront/gnp040

Blegen, M., Spector, N., Ulrich, B., Lynn, M., Barnsteiner, J., & Silvestre, J. (2015). Preceptor

 support in hospital transition to practice programs. *Nursing Management 45*(12), 642-

 649. doi:10.1097/NNA.0000000000000278

Boerner, K., Burack, O., Jopp, D., & Mock, S. (2015). Grief after patient death: Direct care staff

 in nursing homes and home care. *Journal of Pain Symptom Management, 49*(2), 214-222.

 https://dx.doi.org/10.1016%2Fj.jpainsymman.2014.05.02.

Boerner, K., Gleason, H., & Jopp, D. (2017). Burnout after patient death: Challenges for direct

 care workers. *Journal of Pain and Symptom Management, 54*(3), 317-325.

 http://dx.doi.org/10.1016/j.jpainsymman.2017.06.006

Bornstein, M., Jager, J., & Putnick, D. (2013). Sampling in developmental science: Situations,

shortcomings, solutions, and standards. *Developmental Review, 33*(4), 357-370.

https://dx.doi.org/10.1016%2Fj.dr.2013.08.003

Brady, D. (2016). An exploration of nursing assistants' perceptions about job satisfaction.

*Critical Care Nursing Quarterly, 39*(4), 371-386. doi:10.1097/CNQ.00000000000000131

Bratt, C., & Gautun, H. (2018). Should I stay or should I go? Nurses wishes to leave nursing

homes and home nursing. *Journal of Nursing Management, 26*(8), 1074-1082.

doi:10.1111/jonm.12639

Brook, J., Aitken, L., Webb, R., MacLaren, J., & Salmon, D. (2019, March). Characteristics of

successful interventions to reduce turnover and increase retention of early career nurses:

A systematic review. *International Journal of Nursing Studies, 91*, 47-59.

https://doi.org/10.1016/j.ijnurstu.2018.11.003

Brutus, S., Aguinis, H., & Wassmer, U. (2013). Self-reported limitations and future directions in

scholarly reports: Analysis and recommendations. *Journal of Management, 39*(1), 48-75.

https://doi.org/10.1177%2F0149206312455245

Burke, R., Hess, E., Baron, A., Levy, C., & Donze, J. (2018). Predicting potential adverse events

during a skilled nursing facility stay: A SNF prognosis score. *Journal of the American

Geriatrics Society, 66*(5), 930-936. doi: 10.1111/jgs.15324

Burton, J., Holtom, B., Sablynski, C., Mitchell, T., & Lee, T. (2010). The buffering effects of job

embeddedness on negative shocks. *Journal of Vocational Behavior, 76*(1), 42-51.

https://psycnet.apa.org/doi/10.1016/j.jvb.2009.06.006

Butler, S., Brennan-Ing, M., Wardamasky, S., & Ashley, A. (2014). Determinants of longer job

    tenure among home care aides: What makes some stay on the job while others leave?

    *Journal of Applied Gerontology, 33*(2), 164-188. doi:10.1177/0733464813495958

Castellucci, M. (2018). CMS makes changes to nursing home star ratings. *Modern Healthcare.*

    Retrieved from https://www.modernhealthcare.com/operations/cms-makes-changes-

    nursing-home-star-ratings

Castle, N. (2010). An instrument to measure job satisfaction of certified nurse assistants. *Applied*

    *Nursing Research, 23*(4), 214-220. doi:10.1016/j.apnr.2008.09.005

Castle, N., Engberg, J., Anderson, R., & Men, A. (2007). Job satisfaction of nurse aides in

    nursing homes: Intent to leave and turnover. *The Gerontologist, 47*(2), 193-204.

    https://doi.org/10.1093/geront/47.2.193

Chen, E., Yang, M., Gao, W., Liu, Y., & De Gieter, S. (2015). Impacts of satisfactions with

    psychological reward and pay on Chinese nurses' work attitudes. *Applied Nursing*

    *Research, 28*(4)*,* 29-34. https://doi.org/10.1016/j.apnr.2015.03.002

Chen, H., & Ayoun, B. (2019). Is negative workplace humor really all that "negative"?

    Workplace humor and hospitality employees' job embeddedness. *International Journal*

    *of Hospitality Management, 79*, 41-49. https://doi.org/10.1016/j.ijhm.2018.12.010

Code of Federal Regulations. (2012). Title 42 – public health, part 483: Requirements for states

    and long term care facilities. Retrieved from www.ecfr.gov/cgi-bin/text-

    idx?c=ecfr&tpl=/ecfrbrowse/Title42/42cfr483_main_02.tpl

Choi, J., & Johantgen, M. (2012). The importance of supervision in the retention of CNAs.

    *Research in Nursing and Health, 35,* 187-199. doi:10.1002/nur.21461

Coetzer, A., Inma, C., & Poisat, P. (2017). The job embeddedness-turnover relationship.

    *Personnel Review, 46*(6), 1070-1088. doi:10.1108/PR-12-2015-0312

Coetzer, A., Inma, C., & Poisat, P. (2018). Job embeddedness and employee enactment of

    innovation-related work behaviors. *International Journal of Manpower, 39*(2), 222-239.

    doi:10.1108/IJM-04-2016-0095

Coetzer, A., Inma, C., & Poisat, P. (2019). Does job embeddedness predict turnover intentions in

    SMEs? *International Journal of Productivity and Performance Management, 68*(2), 340-

    361. doi:10.1108/IJPPM-03-2018-0108

Coetzer, A., Inma, C., Poisat, P., Redmond, J., & Standing, C. (2019). Identifying and

    differentiating key employees from owners and other employees in SMEs. *Journal of*

    *Small Business Management, 53*(1), 37-53. doi:10.1111/jsbm.12066

Cohen-Mansfield, J. (1997). Turnover among nursing home staff: A review. *Nursing*

    *Management, 28*(5), 59-64. http://dx.doi.org/10.1097/00006247-199705010-00015

Collins, B., & Mossholder, K. (2017). Fairness means more to some than others: Interactional

    fairness, job embeddedness, and discretionary work behaviors. *Journal of Management,*

    *43*(2), 293-318. doi:10.1177/0149206314527132

Creswell, J. (2002). Educational research: Planning, conducting, and evaluating quantitative and

    qualitative research. Upper Saddle River, NJ: Merrill Prentice Hall.

Creswell, J. (2012). Educational research: Planning, conducting, and evaluating quantitative and

    qualitative research (4th ed.). Upper Saddle River, NJ: Merrill Prentice Hall.

Creswell, J. (2014). Research design: Qualitative, quantitative, and mixed methods approaches.

    Los Angeles, CA: SAGE Publications.

Creswell, J., & Poth, C. (2018). *Qualitative inquiry & research design: Choosing among five*

    *approaches* (4th ed.). Thousand Oaks, CA: SAGE Publications.

Cunningham, G., Fink, J., & Sagas, M. (2005). Extensions and further examination of the job

    embeddedness construct. *Journal of Sports Management, 19*(3), 319-335.

    https://doi.org/10.1123/jsm.19.3.319

Curtis, E., Comiskey, C., & Dempsey, O. (2014). Importance and use of correlational research.

    *Nurse Researcher, 23*(6), 20-50. https://doi.org/10.7748/nr.2016.e1382

Dabney, B., & Kalisch, B. (2015). Nurse staffing levels and patient-reported missed nursing care.

    *Journal of Nursing Care Quality, 30*(4)*,* 306-312.

    https://doi.org/10.1097/NCQ.000000000000000123

Darrat, M., Amyx, D., & Bennett, R. (2017, May). Examining the impact of job embeddedness

    on salesperson deviance: The moderating role of job satisfaction. *Industrial Marketing*

    *Management, 63*, 158-166. http://dx.doi.org/10.1016/j.indmarman.2016.10.012

Dechawatanapaisal, D. (2017). The mediating role of organizational embeddedness on the

    relationship between quality of work life and turnover: Perspectives from healthcare

    professionals. *International Journal of Manpower, 38*(5)*,* 696-711.

    https://doi.org/10.1108/IJM-12-2015-0205

Dechawatanapaisal, D. (2018). Nurses' turnover intention: The impact of leader-member

    exchange, organizational identification and job embeddedness. *Journal of Advance*

    *Nursing, 74*(6), 1380-1391. https://doi.org/10.1111/jan.13552

Deci, E., Koestner, R., & Ryan, R. (1999). A meta-analytic review of experiments examining the

    effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin, 125*(6)*,* 627-

    668. https://psycnet.apa.org/doi/10.1037/0033-2909.125.6.627

Decker, F., Harris-Kojetin, L., & Bercovitz, A. (2009). Intrinsic job satisfaction, overall

    satisfaction, and intention to leave the job among nursing assistants in nursing homes.

    *The Gerontologist, 49*(5), 596-610. doi:10.1093/geront/gnp051

Dellefield, M., Castle, N., McGilton, K., & Spilsbury, K. (2015). The relationship between

    registered nurses and nursing home quality: An integrative review (2008-2014). *Nursing*

    *Economics, 33*(2), 95-108. Retrieved from http://eprints.whiterose.ac.uk/87183/

DePasquale, N., Mogle, J., Zarit, S., Okechukwu, C., Kossek, E., & Almeida, D. (2018). The

    family time squeeze: Perceived family time adequacy buffers work strain in certified

    nursing assistants with multiple care giving roles. *The Gerontologist, 58*(3), 546-555.

    doi:10.1093/geront/gnw191

DePasquale, N., Polenick, C., Davis, K., & Berkman, L. (2018). A bright side to the work-family

    interface: A husband's support as a resource in double-and-triple duty caregiving wives'

    work lives. *The Gerontologist, 58*(4), 674-685. doi:10.1093/geront/gnx016

Dill, J., Morgan, J., & Marshall, V. (2012). Contingency, employment intentions, and retention

    of vulnerable low-wage workers: An examination of nursing assistants in nursing homes.

    *The Gerontologist, 53*(2), 2220234. doi:10.1093/geront/gns085

Duffield, C., Roche, M., Homer, C., Buchan, J., & Dimitrelis, S. (2014). A comparative review

    of nurse turnover rates and costs across countries. *Journal of Advanced Nursing, 70*(12),

    2703-2712. https://doi.org/10.1111/jan.12483

Edwards, D., Hawker, C., Carrier, J., & Rees, C. (2015). A systematic review of the

    effectiveness of strategies and interventions to improve the transition from student to

    newly qualified nurse. *International Journal of Nursing Studies, 52*(7)*,* 1254-1268.

    doi:10.1016/j.ijnurstu.2015.03.007

Fang, D., & Kesten, K. (2017). Retirements and succession of nurses in 2016-2025. *Nursing*

   *Outlook, 65*(5), 633-642. https://doi-org.10.1016/j.outlook.2017.03.003

Fasbender, U., Van der Heijden, B., & Grimshaw, S. (2018). Job satisfaction, job stress and

   nurses' turnover intentions: The moderating roles of on-the-job and off-the-job

   embeddedness. *Journal of Advanced Nursing, 75*(2), 327-337. doi:10.111/jan.13842

Feldman, D., Ng, T., & Vogel, R. (2012). Off-the-job embeddedness: A reconceptualization and

   agenda for future research. In J. J. Martocchio, A. Joshi, & H. Liao (Eds)., *Research in*

   *personnel and human resources management, vol. 31* (pp. 209-251). Bingley, UK:

   Emerald Publishing Group Limited. http://dx.doi.org/10.1108/s0742-

   7301(2012)0000031008

Felps, W., Mitchell, T., Herman, D., Lee, T., Holtom, B., & Harman, W. (2009). Turnover

   contagion: How coworkers' job embeddedness and job search behaviors influence

   quitting. *The Academy of Management Journal, 52*(3), 545-561. Retrieved from

   https://www.jstor.org/stable/40390303

Ferreira, A. (2017). Leader and peer ethical behavior influences on job embeddedness. *Journal*

   *of Leadership and Organizational Studies, 24*(3), 345-356.

   doi:10.1177/1548051817702095

Figuerola, S., Bulos, M., Forges, E., & Judkins-Cohn, T. (2015). Stabilizing and retaining a

   quality nursing work force through the use of the married state preceptorship model.

   *Journal of Continuing Education Nurses, 44*(8), 365-373. doi:10.3928/00220124-

   20130603-08

Flinkman, M., & Salantera, S. (2015). Early career experiences and perceptions – a qualitative

   exploration of the turnover of young registered nurses and intention to leave the nursing

profession in Finland. *Journal of Nursing Management, 23*(8), 1050-1057.

https://doi.org/10.1111/j.1365-2648.2010.05322.x

Fowler, F. (2009). *Survey research methods* (4th ed). Thousand Oaks, CA: SAGE Publications.

Gardner, T., Wright, P., & Moynihan, L. (2011). The impact of motivation, empowerment, and

skill enhancing practices on aggregate voluntary turnover: The mediating effect of

collective affective commitment. *Personnel Psychology, 64*(2), 315-350.

https://doi.org/10.1111/j.1744-6570.2011.01212.x

Gautun, H., & Grodem, A. (2015). Prioritizing care services: Do the oldest users lose out?

*International Journal of Social Welfare, 24*(1), 73-80. https://doi.10.1111/ijsw.12116

Gautun, H., & Syse, A. (2017). Earlier hospital discharge: A challenge for Norwegian

municipalities. *Nordic Journal of Social Research, 8,* 1-17.

https://doi.org/journals.hioa.no/index/php/njsr/article/view/2204

Ghosh, D., & Gurunanthan, L. (2015). Job embeddedness: A ten-year literature review and

proposed guidelines. *Global Business Review, 16*(5), 856-866.

doi:10.1177/0972150915591652

Gomaa, A., Tapp, L., Luckhaupt, S., Vanoli, K., Sarmiento, R., Raudabaugh, W., … Sprigg, S.

(2015). Occupational trauma injuries among workers in health care facilities – United

States, 2012-2014. *Morbidity and Mortality Weekly Report, 64*(15), 405-410. Retrieved

from

https://pdfs.semanticscholar.org/f275/bc5d9bc4ece818459b157715aa7dce94605a.pdf?_g

a=2.117614537.1381168502.1563498561-2091928120.1555245399

Gray, J., & Lukyanova, V. (2017). Examining certified nursing assistants' perceptions of work-

related identity. *Creative Nursing, 23*(2), 112-120. doi:10.1891/1078.4535.23.2.112

Gray, M., Shadden, B., Henry, J., Di Brezzo, R., Ferguson, A., & Fort, I. (2016). Meaning

　　　making in long-term care: What do certified nursing assistants think? *Nursing Inquiry,*

　　　*23*(3), 244-252. doi:10.1111/nin.12137

Greene, J., Mero, N., & Werner, S. (2016). The negative effects of job embeddedness on

　　　performance. *Journal of Managerial Psychology, 33*(1), 58-73. doi:10.1108/JMP-02-

　　　2017-0074

Griffeth, R., Hom, P., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of

　　　employee turnover: Update, moderator tests, and research implications for the

　　　millennium. *Journal of Management, 26*(3), 463-488.

　　　https://doi.org/10.1177%2F014920630002600305

Hagerty, D., & Buelow, J. (2017). Certified nursing assistants' perceptions and generational

　　　differences. *American Journal of Health Sciences, 8*(1), 1-6.

　　　https://doi.org/10.19030/ajhs.v8i1.9898

Halbesleben, J., Neveu, J., Paustian-Underdahl, S., & Westman, M. (2014). Getting to the

　　　"COR": Understanding the role of resource sin conservation of resources theory. *Journal*

　　　*of Management, 40*(5), 1334-1364. https://doi.org/10.1177%2F0149206314527130

Halfer, D. (2011). Job embeddedness factors and retention of nurses with 1 to 3 years of

　　　experience. *The Journal of Continuing Education in Nursing, 42*(10), 468-476.

　　　doi:10.3928/00220124-20110601-02

Han, K., Trinkoff, A., Storr, C., Lerner, N., Johantgen, M., & Kyungsook, G. (2014).

　　　Associations between state regulations, training length, perceived quality and job

　　　satisfaction among certified nursing assistants: Cross-sectional secondary data analysis.

*International Journal of Nursing Studies, 51*(8), 1135-1141.

http://dx.doi.org/10.1016/j.ijnurstu.2013.12.008

Hanisch, K., & Hulin, C. (1991). General attitudes and organizational withdrawal: An evaluation

of a causal model. *Journal of Vocational Behavior, 39*(1), 110-128.

https://doi.org/10.1016/0001-8791(91)90006-8

Hardy, L. (1990). The fabric of this world: Inquiries into calling, career choice, and the design of

human work. Grand Rapids, MI: William B. Eerdmans.

Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. *Evidence*

*Based Nursing, 18*(3), 66-67. doi:10.1136/eb-2015-102129

Holtom, B., Mitchell, T., Lee, T., & Eberly, M. (2008). Turnover and retention research: A

glance at the past, a closer review of the present and a venture into the future. *The*

*Academy of Management Annals, 2*(1), 231-274.

https://doi.org/10.1080/19416520802211552

Holtom, B., & O'Neill, B. (2004). Job embeddedness: A theoretical foundation for developing a

comprehensive nurse retention plan. Journal of Nursing Administration, 34(5), 216-227.

Retrieved from

https://pdfs.semanticscholar.org/6e67/33a6e190f8b98dc4d37b9dff90c3e8774ed7.pdf

Hom, P., Griffeth, R., & Sellaro, C. (1984). The validity of Mobley's 1977 model of employee

turnover. *Organizational Behavior and Human Performance, 34*(2), 141-174. Retrieved

from https://psycnet.apa.org/doi/10.1016/0030-5073(84)90001-1

Hopson, M., Petri, L., & Kufera, J. (2018). A new perspective on nursing retention: Job

embeddedness in acute care nurses. *Journal of Nurses in Professional Development,*

*34*(1), 31-37. doi:10.1097/NND.0000000000000420

Hosmer, D., Limeshow, S., & Sturdivant, X. (2013). *Applied logistic regression* (3ʳᵈ ed.). Hoboken, NJ: Wiley.

Howley, E. (2019, October). Nursing home facts and statistics. *U.S. News and World Report.* Retrieved from https://health.usnews.com/health-news/best-nursing-homes/articles/nursing-home-facts-and-statistics

Hyde, K. (2000). Recognising deductive processes in qualitative research. *Qualitative Market Research: An International Journal, 3*(2), 82-90. https://doi.org/10.1108/135227500103

Irving, P., & Montes, S. (2009). Met expectations: The effects of expected versus delivered inducement on employee satisfaction. *Journal of Occupational and Organizational Psychology, 82*(2), 431-451. https://doi.org/10.1348/096317908X312650

Irwin, C., Bliss, J., & Poole, K. (2018). Does preceptorship improve confidence and competence in newly qualified nurses: A systematic literature review. *Nurse Education Today, 60*, 35-46. doi:10.1016/j.nedt.2017.09.011

Jager, J., Putnick, D., & Bornstein, M. (2017). More than just convenient: The scientific merits of homogeneous convenience samples. *Monographs of the Society for Research in Child Development, 82*(2), 13-30. https://dx.doi.org/10.1111%2Fmono.12296

Jang, Y., Lee, A., Zadrozny, M., Bae, S., Kim, M., & Marti, N. (2015). Determinants of job satisfaction and turnover intent in home health workers. The role of job demands and resources. *Journal of Applied Gerontology, 36*(1)*,* 524-534. doi:10.1177/0733464815586059

Jiang, K., Liu, D., McKay, P., Lee, T., & Mitchell, T. (2012). When and how is job embeddedness predictive of turnover? A meta-analytic investigation. *Journal of Applied Psychology, 97*(5), 1077-1096. doi:10.1037/a0028610

Jiang, Z. (2017). Social support and career psychological states: An integrative model of person-environment fit. *Journal of Career Assessment, 25*(2), 219-237. https://doi.org/10.1177/1069072715621019

Johnson, S. (2018). "Convince your patients and you will convince society": Career decisions and professional identity among nurses in India. *Sage Open, 8*(1). doi:10.1177/2158244018763014

Junk, T. (1999). Nuclear instruments and methods in physics research: Accelerators, spectrometers, detectors, and associated equipment. *Science Diet, 434*(2), 3. Retrieved from: http://physics.bu.edu/sites/atlas/files/2010/05/CLs-NIMA.pdf

Karatepe, O. (2016). Does job embeddedness mediate the effects of coworker and family support on creative performance? An empirical study in the hotel industry. *Journal of Human Resources in Hospitality & Tourism, 15*(2), 119-132. http://dx.doi.org/10.1080/19368623.2012.626730

Karatepe, O., & Avci, T. (2019). Nurses' perceptions of job embeddedness in public hospitals. *SAGE Open, 9*(1), 1-9. doi:10.1177/2158244109828848

Kash, B., Castle, N., & Phillips, C. (2007). Nursing home spending, staffing, and turnover. *Health Care Management Review, 32*(3), 253-262. https://doi.org/10.1097/01.HMR.0000281625.20740.13

Keller, T., & Alsdorf, K. L. (2012). *Every good endeavor: Connecting your work to God's work*. New York, NY: Dutton.

Kelley, A. S., Covinsky, K. E., Gorges, R. J., Mckendrick, K., Bollens-Lund, E., Morrison, R. S., & Ritchie, C. S. (2016). Identifying older adults with serious illness: A critical step

toward improving the value of health care. *Health Services Research, 52*(1), 113-131.

doi:10.1111/1475-6773.12479

Khan, M., Aziz, S., Afsar, B., & Latif, A. (2018). The effect of job embeddedness on turnover

intentions, work engagement, and job performance. *Journal of Tourism & Hospitality,*

*7*(3), 1-9. doi:10.4172/2167-0269.1000354

Kiazad, K., Holtom, B., Hom, P., & Newman, A. (2015). Job embeddedness: A multifoci

theoretical extension. *American Physcholobical Association, 100*(3), 641-659.

http://dx.doi.org/10.1037/a0038919

Kolanowski, A., Van Haitsma, K., Penrod, J., Hill, N., & Yevchak, A. (2015). "Wish we would

have known that!" Communication breakdown impedes person-centered care.

*Gerontologist, 55* (Suppl.), 550-560. http://dx.doi.org/10.1093/geront/gnv014

Kovner, C., Brewer, C., Fatehi, F., & Jun, J. (2014). What does nurse turnover rate mean and

what is the rate? *Policy, Politics, & Nursing Practices, 15*(3-4), 64-71.

doi:10.1177/1527154414547953

Kusmaul, N., & Bunting, M. (2017). Perspectives on caregiving: A qualitative evaluation of

certified nursing assistants. *Geriatric Nursing, 38*(2), 146-151.

https://doi.org/10.1016/j.gerinurse/2016.09.004

Law, K., Wong, C., & Mobley, W. (1998). Toward a taxonomy of multidimensional constructs.

*Academy of Management Review, 23*(4), 741-755. doi:10.5465/AMR.1998.1255636

Lee, T., Burch, T., & Mitchell, T. (2014). The story of why we stay: A review of job

embeddedness. *Annual Review of Organizational Psychology and Organizational*

*Behavior, 2014*(1), 199-216. doi:10.1146/annualreviews.org

Lee, T., Mitchell, T., Sablynski, C., Burton, J., & Holtom, B. (2004). The effects of job

    embeddedness on organizational citizenship, job performance, volition always absences,

    and voluntary turnover. *The Academy of Management Journal, 47*(5), 711-722. Retrieved

    from https://www.jstor.org/stable/20159613

Lerner, N., Johantgen, M., Trinkoff, A., Storr, C., & Han, K. (2014). Are nursing home survey

    deficiencies higher in facilities with greater staff turnover. *Journal of the American

    Medical Directors Association, 15*(2), 102-107. doi: 10.1016/j.jamda.2013.09.003

Li, D., Li, X., Wang, L., Wang, G., & Newton, C. (2019). Work-family conflict influences the

    relationship between family embeddedness and turnover intentions. *Social Behavior and

    Personality: An International Journal, 47*(4), 1-13. https://doi.org/10.2224/sbp.7640

Li, J., Lee, T., Mitchell, T., Hom, P., & Griffeth, R. (2016). The effects of proximal withdrawal

    states on job attitudes, job searching, intent to leave, and employee turnover. *Journal of

    Applied Psychology, 101*(10), 1436-1456. https://doi.org/10.1037/apl0000147

Lyu, Y., & Zhu, H. (2017). The predictive effects of workplace ostracism on employee attitudes:

    A job embeddedness perspective. *Journal of Business Ethics, 2017*, 1-13.

    https://doi.org/10.1008/s10551-017-3741

McGilton, K., Chu, C., Shaw, A., Wong, R., & Poeg, J. (2016). Outcomes related to effective

    nurse supervision in long-term care homes: An integrative review. *Journal of Nursing

    Management, 24*(8), 1007-1026. doi:10.11111/jonm.12419

McIlvennan, C., Eapen, Z., & Allen, L. (2015). Hospital readmission reduction program.

    *Circulation, 131*(20), 1796-1803.

    https://dx.doi.org/10.1161%2FCIRCULATIONAHA.114.010270

Mallol, C., Holtom, B., & Lee, T. (2007). Job embeddedness in a culturally diverse environment. *Journal of Business Psychology, 22*(1), 35-44. doi:10.1007/s10869-00709045-x

March, J., & Simon, J. (1958). *Organizations.* New York, NY: Wiley.

Martin, W., & Bridgmon, K. (2012). *Quantitative and statistical research methods.* San Francisco, CA: Jossey-Bass.

Maurits, E., de Veer, A., van der Hoek, L., & Francke, A. (2015). Autonomous home-care nursing staff are more engaged in their work and less likely to consider leaving the healthcare sector: A questionnaire survey. *International Journal of Nursing Studies, 52*(12),* 1816-1823. https://doi.org/10.1016/j.ijnurstu.2015.07.006

Medicare.gov. (n.d.). Skilled nursing facility (SNF) care. Retrieved from https://www.medicare.gov/coverage/skilled-nursing-facility-snf-care

Mendenhall, W., & Sincich, T. (2012). *A second course in statistics: Regression analysis* (7th ed.). Boston, MA: Pearson.

Mengshoel, A. (2012). Mixed methods research – so far easier said than done. *Manual Therapy, 17*(4), 373-375. https://doi.org/10.1016/j.math.2012.02.006

Meyer, D., Raffle, H., & Ware, L. (2014). The first year: Employment patterns and job perceptions of nursing assistants in rural setting. *Journal of Nursing Management, 22*(6), 769-778. https://doi.org/10.1111/j.1365-2834.2012.01441.x

Meyer, J., & Allen, N. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review, 1*(1), 61-89. https://doi.org/10.1016/1053-4822(91)90011-Z

Mitchell, T., Holtom, B., Lee, T., Sablynski, C., & Erez, M. (2001). Why people stay: Using job

    embeddedness to predict voluntary turnover. *Academy of Management Journal, 44*(6),

    1102-1121. doi:10.2307/3069391

Mohapartra, M., & Shrama, B. (2010). Study of employee engagement and its predictors in an

    Indian public sector undertaking. *Global Business Review, 11*(2), 281-301.

    https://doi.org/10.1177%2F097215091001100210

National Center for Health Statistics. (2019). Nursing home care. Retrieved from

    https://www.cdc.gov/nchs/fastats/nursing-home-care.htm

Ng, T., & Feldman, D. (2012). The effects of organizational and community embeddedness on

    work-to-family and family-to-work conflict. *Journal of Applied Psychology, 97*(6), 1233-

    1251. https://doi.org/10.1037/a0029089

Ng, T., & Feldman, D. (2014). Community embeddedness and work outcomes: The mediating

    role of organizational embeddedness. *Human Relations, 67*(1), 71-103.

    doi:10.1177/0081726713486946

Nguyen, V., Taylor, G., & Bergiel, E. (2017). Organizational antecedents of job embeddedness.

    *Management Research Review, 40*(11), 1216-1235. doi:10.1108/MRR-11-2016-0255

Norwood, S. (2010). Research essentials: Foundations for evidenced-based practice. Boston,

    MA: Pearson Education, Inc.

Nursing Solutions Inc. (2019). *National health care retention and RN staffing report.* Retrieved

    from http://www.nsinursingsolutions.com/Files/assets/library/retention-

    institute/2019%20National%20Health%20Care%20Retention%20Report.pdf

O'Malley, M. (2000). Creating commitment: How to attract and retain talent aged employees by

    building relationships that last. New York, NY: Wiley.

Ongori, H. (2007). A review of the literature on employee turnover. *African Journal of Business Management, 1*(3), 49-54. Retrieved from http://academicjournals.org/ajbm

Paraprofessional Healthcare Institute. (2013). *America's direct-care workforce.* Retrieved from https://phinational.org/wp-content/uploads/legacy/phi-facts-3.pdf

Parse, R. (2003). Living quality: A human becoming phenomenon. *Nursing Science Quarterly, 26*(2), 111-115. https://doi.org/10.1177%2F0894318413477145

Petitta, L., Jiang, L., & Hartel, C. (2016). Emotional contagion and burnout among nurses and doctors: Do joy and anger from different sources matter? *Stress and Health, 33*(4), 358-369. doi:10.1002/smi.2724

PHI. (2015). *U.S. nursing assistants employed in nursing homes: Key facts.* Retrieved from https://phinational.org/wp-content/uploads/legacy/phi-nursing-assistants-key-facts.pdf

Pickering, C., Nurenberg, K., & Schiamberg, L. (2017). Recognizing and responding to the "toxic" work environment: Worker safety, patient safety, and abuse/neglect in nursing homes. *Qualitative Health Research, 27*(12), 1870-1881. doi:10.1177/1049732317723889

Porter, C., Maertz, C., Rigby, J., Posthuma, R., Joplin, J., Gordon, M., & Graves, K. (2019). On-the-job and off-the-job embeddedness differentials influence relationships between informal job search and turnover. *Journal of Applied Psychology, 104*(5), 678-689. http://dx.doi.org/10.1037/apl0000375

Potgieter, I., Coetzee, M., & Ferreira, N. (2018). The role of career concerns and workplace friendship in the job embeddedness-retention practices satisfaction link. *SA Journal of Industrial Psychology, 44*(0), 1-9. https://doi.org/10.4102/sajip.v44i0.1519

Probst, J., Baek, J., & Laditka, S. (2009). Characteristics and recruitment paths of certified

    nursing assistants in rural and urban nursing homes. *The Journal of Rural Health, 25*(3).

    267-275. doi:10.1111/j.1748-0361.2009.00229.x

Putney, T. (2019, August). *Quality service and turnover.* Roanoke, VA.

Ramesh, A., & Gelfand, M. (2010). Will they stay or will they go? The role of job embeddedness

    in predicting turnover in individualistic and collectivistic culture. *Journal of Applied*

    *Psychology, 95*(5), 807-823. https://doi.org/10.1037/a0019464

Ranganathan, P., Pramesh, C., & Aggarwal, R. (2017). Common pitfalls in statistical analysis:

    Logistic regression. *Perspectives in Clinical Research, 8*(3), 148-151.

    doi:10.4103/picr.PICR_87_17

Rau, J. (2019, March 15). Trump administration cuts the size of fines for health violations in

    nursing homes. *NPR*. Retrieved from https://www.npr.org/sections/health-

    shots/2019/03/15/702645465/trump-administration-cuts-the-size-of-fines-for-health-

    violations-in-nursing-hom

Reitz, O. (2014a). Job embeddedness: A concept analysis. *Nursing Forum, 49*(3), 159-166.

    https://doi.org/10.1111/nuf.12053

Reitz, O. (2014b). The job embeddedness instrument: An evaluation of validity and reliability.

    *Geriatric Nursing, 35*(5), 351-356. https://doi.org/10.1016/j.gerinurse.2014.04.011

Reitz, O., & Anderson, M. (2011). An overview of job embeddedness. *Journal of Professional*

    *Nursing, 27*(5), 320-327. doi:10.1016/j.profnurs.2011.04.004

Reitz, O., Anderson, M., & Hill, P. (2010). Job embeddedness and nurse retention. *Nurse*

    *Administration Quarterly, 34*(3), 190-200. doi:10.1097/NAQ.0b013e3181e702b7

Roberts, P., Priest, H., & Traynor, M. (2006). Reliability and validity in research. *Nursing Standard, 20*(44), 41-50. doi:10.7748/ns2006.07.20.44.41.c6560

Rosenbaum, M. (2018, January). Will 2018 be the year healthcare addresses its turnover problem? *Financial Management.* Retrieved from https://www.beckerhospitalreiew.com/finance/will-2018-be-the-year-healthcare-addresses-its-turnover-problem.html

Roswell, J., Demir, D., & Gulyas, A. (2015). Individual and contextual antecedents of workplace aggression in aged care nurses and certified nursing assistants. *International Journal of Nursing Practice, 21*(4), 367-375. doi:10.1111/ijn.12262

Royalty, A. (1998). Job-to-job and job-to-nonemployment turnover by gender and education level. *Journal of Labor Economics, 16*(2), 392-433. https://doi.org/10.1086/209894

Schivinski, B., & Dabrowski, D. (2014). The effect of social media communication on consumer perceptions of brands. *Journal of Marketing Communications, 22*(2), 189-214. Retrieved from http://www.tandfonline.com/doi/abs/10.1080/13527266.2013.871323?journalCode=rjmc20

Sender, A., Rutishauser, L., & Staffelbach, B. (2017). Embeddedness across contexts: A two-country study on the additive and buffering effects of job embeddedness on employee turnover. *Human Resource Management Journal, 28*, 340-356. doi:10.1111/1748-8583.12183

Sheridan, J., White, J., & Fairchild, T. (1992). Ineffective staff, ineffective supervision, or ineffective administration? Why some nursing homes fail to provide adequate care. *The Gerontologist, 32*(3), 334-341. https://doi.org/10.1093/geront/32.3.334

Silvestre, J., Ulrich, B., Johnson, T., Spector, N., & Blegen, M. (2017). *A multisite study on a new graduate registered nurse transition to practice program: Return on investment*. *Nursing Economics, 35*(3), 110-118. Retrieved from https://www.nursingeconomics.net/necfiles/2017/MJ17/110.pdf

Singh, B., Shaffer, M., & Selvarajan, T. (2018). Antecedents of organizational and community embeddedness: The roles of support, psychological safety, and need to belong. *Journal of Organizational Behavior, 39*(3)*,* 339-354. https://doi.org/10.1002/job.2223

Sjorgren, K., Lindkvist, M., Sandman, P., 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*(9-10), 1310-1319. doi:10.1111/joen.12734

Spetz, J., Trupin, L., Bates, T., & Coffman, J. (2015). Future demand for long-term care workers will be influenced by demographic and utilization changes. *Heath Affairs, 34*(6)*,* 936-945. doi:10.1377/hlthaff.2015.0005

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*.* https://doi.org/10.1155/2015/157924

Stake, R. (2010). *Qualitative research.* New York, NY: The Guilford Press.

Sun, T., Zhao, X., Yang, L., & Fan, L. (2012). The impact of psychological capital on job embeddedness and job performance among nurses: A structural equation approach. *Journal of Advanced Nursing, 68*(1), 69-79. doi:10.1111/j.1365-3648.2011.05715.x

Swider, B., Boswell, W., & Zimmerman, R. (2011). Examining the job search-turnover

relationship: The role of embeddedness, job satisfaction, and available alternatives.

*Journal of Applied Psychology, 96*(2), 432-441. https://doi.org/10.1037/a0021676

Tabachnick, B., & Fidell, L. (2014). *Using multivariate statistics* (6th ed). Harlow, UK: Pearson.

Tanova, C., & Holtom, B. (2008). Using job embeddedness factors to explain voluntary turnover

in four European countries. *The International Journal of Human Resource Management,

19*(9), 1553-1568. https://doi.org/10.1080/09585190802294820

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alfa. *International Journal of

Medical Education, 2,* 53-55. doi:10.5116/ijme.4dfb.8dfd

Tews, M., Michel, J., Xu, S., & Drost, A. (2015). Workplace fun matters… but what else?

*Employee Relations, 37*(2), 248-267. doi:10.1108/ER-10-2013-0152

Thakur, S., & Bhatnagar, J. (2017). Mediator analysis of job embeddedness: Relationship

between work-life balance practices and turnover intentions. *Employee Relations, 39*(5),

718-731. doi:10.1108/ER-11-2016-0233

Tian, A., Cordery, J., & Gamble, J. (2016). Staying and performing: How human resource

management practices increase job embeddedness and performance. *Personnel Review,

45*(5), 947-968. https://doi.org/10.1108/PR-09-2014-0194

Trinkoff, A., Han, K., Storr, C., Lerner, N., Johnatgen, M., & Gatrell, K. (2013). Turnover,

staffing, skill mix, and resident outcomes in a national sample of US nursing homes. *The

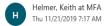Journal of Nursing Administration, 43*(12) 630-636.

doi:10.1097/NNA.0000000000000004

Turner, S. (2015). Update on nurse staffing obligations in skilled nursing facilities. *Geriatric

Nursing, 36*(1), 59-60. http://dx.doi.org/10.1016/j.gerinurse.2014.12.011

Twigg, D., Gelder, L., & Myers, H. (2015). The impact of understaffed shifts on nurse-sensitive

outcomes. *Journal of Advanced Nursing, 71*(7)*,* 1564-1572. doi:10.1111/jan.12616

U.S. Department of Health and Human Services. (2011). *Understanding direct care workers: A*

*snapshot of two of America's most important jobs.* Retrieved from

https://www.ahcancal.org/quality_improvement/Documents/UnderstandingDirectCareWo

rkers.pdf

U.S. Department of Labor Bureau of Labor Statistics. (2015). *Women in the labor force: A*

*databook.* Retrieved from https://www.bls.gov/opub/reports/womens-

databook/archive/women-in-the-labor-force-a-databook-2015.pdf

U.S. Department of Labor Bureau of Labor Statistics. (2019). Occupational outlook handbook,

nursing assistants and orderlies. Retrieved from

https://www.bls.gov/ooh/healthcare/nursing.assistants.htm

Valle, M., Ruz, G., & Varas, S. (2015). A survival model based on met expectations. *Academia*

*Revista Latinoamericano, 28*(2), 177-194. doi:10.1108/ARLA-01-2014-0011

Van der Heijden, B., Peeters, M., Le Blanc, P., & Van Breukelen, J. (2018). Job characteristics

and experience as predictors of occupational turnover intention and occupational turnover

in the European nursing sector. *Journal of Vocational Behavior, 108,* 108-120.

https://doi.org/10.1016/j.jvb.2018.06.008

Van Duzer, J. (2010). Why business matters to God:(And what still needs to be fixed). Downers

Grove, IL: IVP Academic.

Walton, A., & Rogers, B. (2017). Work hazards faced by nursing assistants in the United States:

A focused literature review. *International Journal of Environmental Research and Public*

*Health, 14*(5), 544-569. https://doi.org/10.3390/ijerph14050544

Wan, Q., Li, Z., Zhou, W., & Shang, S. (2018). Effects of work environment and job

    characteristics on the turnover intention of experienced nurses: The mediating role of

    work engagement. *Journal of Advanced Nursing, 74*(6)*,* 1332-1341.

    https://doi.org/10.1111.jan.13528

Ward-Griffin, C., Brown, J., St-Amant, O., Sutherland, N., Martin-Matthews, A., Keefe, J., &

    Kerr, M. (2015). Nurses negotiating professional-familial boundaries: Striving for

    balance within double duty caregiving. *Journal of Family Nursing, 21*(1), 57-85.

    doi:10.1177/1074840714562645

Weiss, D., Dawis, R., England, G., & Lofquist, L. (1968). *A theory of work adjustment.*

    *Minnesota Studies in Vocational Rehabilitation, 23*(1), 1-16. Retrieved from

    http://vpr.psych.umn.edu/sites/g/files/pua2236/f/monograph_xxiii_-

    _a_theory_of_work_adjustment_a_revision.pdf

Wheeler, A., Harris, K., & Sablynski, C. (2012). How do employees invest abundant resources?

    The mediating role of work effort in the job-embeddedness/job-performance relationship.

    *Journal of Applied Social Psychology, 42*(1), 244-266. http://dx.doi.org/10.1111/j.1559-

    1816.2012.01023.x

Wiener, J., Squillance, M., Anderson, W., & Khatutsky, G. (2009). Why do they stay? Job tenure

    among certified nursing assistants in nursing homes. *The Gerontologist, 49*(2), 198-210.

    doi:10.1093/geront/gnp027

Williams, C. (2007). Research methods. *Journal of Business & Economic Research, 5*(3), 65-72.

    Retrieved from https://clutejournals.com/index.php/JBER/article/download/2532/2578

Woodhead, E., Northrop, L., & Edelstein, B. (2016). Stress, social support and burnout among long-term care nursing staff. *Journal of Applied Gerontology, 35*(1), 84-105. doi:10.1177/0733464814542465

Yamaguchi, Y., Inoue, T., Harada, H., & Oike, M. (2016). Job control, work-family balance and nurses' intention to leave their profession and organization: A comparative cross-sectional survey. *International Journal of Nursing Studies, 64*, 52-62. https://doi.org/10.1016/j.ijnurstu.2016.09.003

Yavas, U., Karatepe, O., & Babakus, E. (2014). Exploring the role of organizational and personal resources in explaining nurse performance in public hospitals in Turkish Republic of Northern Cyprus. *Journal of Health Management, 16*(1), 1-12. https://doi.org/10.1177%2F0972063413518676

Zhang, M., Fried, D., & Griffeth, R. (2012). A review of job embeddedness: Conceptual, measurement issues and directions for future research. *Human Resource Management Review, 22*(3), 220-231. doi:10.1016/j.hrmr.2012.02.004

Zhang, Y., Punnett, L., & Nannini, A. (2016). Work-family conflict, sleeping and mental health of nursing assistants working in nursing homes. *Workplace Health and Safety, 65*(7), 295-303. doi:10.1177/2165079916665397

Zhang, Y., Qian, Y., Wu, J., Wen, F., & Zhang, Y. (2016). The effectiveness and implementation of mentoring program for newly graduated nurses: A systematic review. *Nurse Education Today, 37*, 136-144. doi:10.1016/j.nedt.2015.11.02

**Appendix A: Site Permission**

Helmer, Keith at MFA
Thu 11/21/2019 7:17 AM
Pressman, Ashley at Berkshire; Putney, Todd at MFA

Dear Ashley,

We are extremely proud of you and congratulate you on the pursuit of your doctorate degree. As always, MFA is committed to continue to support you and your endeavors by granting permission for you to conduct your research at MFA facilities.

Since the topic of your doctoral research is Job Embeddedness and Certified Nursing Assistant Retention in Skilled Nursing Facilities, I would respectfully request that upon the finalization of your project, that the data, analysis and findings of the study be shared with key MFA staff and a copy of your study be provided to MFA.

Please call if you have questions.

Best wishes.

Keith Helmer
Chief Operating Officer
Medical Facilities of America

**Appendix B: Survey Permission**

**From:** Terence R Mitchell <trm@uw.edu>
**Date:** June 25, 2019 at 10:26:30 PM EDT
**To:** Ashley Pressman <malnsew@yahoo.com>
**Subject: RE: JE construct**

Thanks for reaching out Ashley. You have my permission to use the JE measure. Best of luck with your work and let us know how it goes.

Terry Mitchell

Terence Mitchell
Professor Emeritus
Foster School of Business
University of Washington
trm@uw.edu
206 283 7408

-----Original Message-----
From: Ashley Pressman [mailto:malnsew@yahoo.com]
Sent: Tuesday, June 25, 2019 6:31 PM
To: Terence R Mitchell
Subject: JE construct

Hello Dr. Mitchell,

I contacted you a few weeks ago through my work email. I am a doctoral student at Liberty University in Virginia and am seeking permission to use the JE construct to examine retention of Certified Nursing Assistants in skilled nursing facilities. I am reaching out to you again using my personal email in hopes that this one reaches you.

Please let me know how I can gain access to this tool.

Sincerely,
Ashley

**Appendix C: Survey Questionnaire**

Participant Qualification Questions

1. Are you 18 years of age or older?

    a. Yes

    b. No

2. Are you employed full-time by Medical Facilities of America (the parent company of

    your Health and Rehabilitation facility)?

    a. Yes

    b. No

3. Are you a certified nursing assistant (CNA)?

    a. Yes

    b. No

Background Information

1. What is your gender?

    a. Male

    b. Female

2. What is your age?

_____ years

3. How long have you been a CNA?

_____ years

4. How long have you been employed by your current facility?

_____ years

5. Is your facility (select one):

    a. Rural

    b. Urban

6. How many beds are in your facility? (please select the closest number if the exact one is not listed)

    a. 60

    b. 90

    c. 120

    d. 180

    e. 240

7. Do you intend to remain at your present facility for the next year?

    a. Yes

    b. No

Job Embeddedness Survey

The following survey will include questions that require responses in three styles: Likert-type

scale questions, yes or no questions, and numerical fill-in-the blank.  For the scale questions,

please consider how much you agree with the statement or question in relationship to your

current role. Do you (5) Strongly agree, (4) Somewhat agree, (3) No opinion (2) Somewhat

disagree or (1) Strongly disagree?

Key:

5-strongly agree

4-somewhat agree

3-no opinion

2-somewhat disagree

1-strongly disagree

Fit-Community

1.  I love the place where I live.                                                    5    4    3    2    1

2.  The weather where I live is suitable for me.                          5    4    3    2    1

3.  This community is a good match for me.                               5    4    3    2    1

4.  I think of the community where I live as home.                     5    4    3    2    1

5.  The area where I live offers the leisure activities that I like.   5    4    3    2    1

Fit-Organization

1.  I like the members of my work group.                                 5    4    3    2    1

2.  My coworkers are similar to me.                                          5    4    3    2    1

3. My job utilizes my skills and talents well.      5   4   3   2   1

4. I feel like I am a good match for this company.      5   4   3   2   1

5. My values are compatible with the organization's values.      5   4   3   2   1

6. I fit with the company's culture.      5   4   3   2   1

7. I like the responsibility and authority I have at this company.      5   4   3   2   1

8. I can reach my professional goals working for this organization.      5   4   3   2   1

9. I feel good about my professional growth and development.      5   4   3   2   1

## Links-Community

1. Are you currently married?      Yes      No

2. If you are married, does your spouse work outside the home?      Yes      No

3. Do you own the home you live in?      Yes      No

4. My family roots are in this community.      5   4   3   2   1

5. How many family members live nearby?      _____

6. How many close friends live nearby?      _____

## Links-Organization

1. How long have been at your present position?      _____ years

2. How long have you worked for this company?      _____ years

3. How long have you worked in the industry?      _____ years

4. How many coworkers do you interact with regularly?      _____

5. How many coworkers are highly dependent on you?      _____

6. How many teams are you on?      _____

7.  How many committees are you on?                         _____


## Sacrifice-Community

1.  Leaving this community would be very hard.                5   4   3   2   1

2.  People respect me a lot in my community.                 5   4   3   2   1

3.  My neighborhood is safe.                                 5   4   3   2   1


## Sacrifice-Organization

1.  I have a lot of freedom on this job to decide how to pursue my     5   4   3   2   1
goals.

2.  The perks of this job are outstanding.                   5   4   3   2   1

3.  I feel that people at work respect me a great deal.      5   4   3   2   1

4.  I would sacrifice a lot if I left this job.              5   4   3   2   1

5.  My promotional opportunities are excellent here.         5   4   3   2   1

6.  I am well compensated for my level of performance.       5   4   3   2   1

7.  The benefits are good at this job.                       5   4   3   2   1

8.  The healthcare benefits provided by this organization are     5   4   3   2   1
excellent.

9.  The retirement benefits provided by this organization are     5   4   3   2   1
excellent.

10. The prospects for continuing employment with this company    5   4   3   2   1
are excellent.

Intent to Stay

        1. I intend to remain at my present facility for the next 12          Yes          No

months.

Appendix D: IRB Approval Letter

# LIBERTY UNIVERSITY.
## INSTITUTIONAL REVIEW BOARD

December 12, 2019

Mary Ashley Pressman
IRB Exemption 4062.121219: Job Embeddedness and Certified Nursing Assistant Retention in Skilled Nursing Facilities

Dear Mary Ashley Pressman,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under exemption category 46.101(b)(2), which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

(2) Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:

(i) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects;

Please note that this exemption only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued exemption status. You may report these changes by submitting a change in protocol form or a new application to the IRB and referencing the above IRB Exemption number.

If you have any questions about this exemption or need assistance in determining whether possible changes to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,

**G. Michele Baker, MA, CIP**
*Administrative Chair of Institutional Research*
**Research Ethics Office**

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Running head: JOB EMBEDDEDNESS AND NURSING ASSISTANT RETENTION