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## Job-Related Stress and Burnout on Turnover Intention of Nurses in Dallas, Texas, During COVID-19

George Ochieng  
*Walden University*

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# Walden University

College of Management and Technology

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George Ochieng

has been found to be complete and satisfactory in all respects,  
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Walden University

2021

Abstract

Job-Related Stress and Burnout on Turnover Intention of Nurses in Dallas, Texas, During

COVID-19

by

George Ochieng

MPhil, Walden University, 2019

MBA, Bellevue University, 2000

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Management

Walden University

August 2021

## Abstract

In a country with a large aging population such as the United States, nursing is a crucial profession that is also a high-stress and high-turnover occupation, leading to a shortage of nurses and increased healthcare costs. The year 2017 saw a 10-year high in nurse turnover. The general management problem is that current efforts to decrease the turnover of nurses remain ineffective. The specific problem studied was the high turnover of nurses in Dallas, Texas, linked to work-related stress and burnout. This quantitative nonexperimental regression and moderation research study aimed to study factors that predict or reduce turnover intention. This research involved testing social exchange theory through an examination of the relationship between job-related stress, burnout, and turnover intention where turnover intention was the dependent variable and determination of whether flexible work arrangements and employee empowerment moderated these relationships. The sample consisted of 122 nurses, randomly sampled from 90 hospitals in Dallas, Texas. Data analysis involved multiple linear regression and moderation analysis. Study results indicated that job-related stress and burnout increased turnover intention, and employee empowerment did not significantly influence the effect of job-related stress and burnout on turnover intention. Flexible work arrangements positively influenced the relationship between job-related stress and burnout on turnover intention. Future studies may involve testing additional variables, varying the methodology, and generalizing other populations and professions. Positive social change implications included increased knowledge on reducing nurse turnover to strengthen continuity of care.

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## Dedication

To God for granting me health and fortitude. To my wife Sarah for her support and encouragement. To my children Baracca, Noah, and Mallia, who provided many welcomed distractions and for being my inspiration. To dad Paul, although no longer with us, for enthusiasm and support for this journey and for making me promise to finish.

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## Chapter 1: Introduction to the Study

### Area of Inquiry

Turnover is a problem in many industries, especially those with high levels of job stress (Dagget et al., 2016a) that are prone to employee burnout (Salvarani et al., 2019). Turnover is especially costly in high-skill sectors such as medicine, where training a new employee constitutes a significant financial burden to employers (Silvestre et al., 2017). The nursing industry satisfies all those conditions: it is a high-stress environment, prone to burnout, high-skilled, and suffers from a high turnover rate (Richardson, 2018a). The rate of attrition among nurses is rising, with the highest rates of turnover since 2007 occurring in 2017 (Nursing Solutions, 2018a). Researchers at the Bureau of Labor Statistics (2017a) verified this problem and indicated that the nursing profession requires a lot of new nurses to prevent a worsening shortage. Identifying methods of retaining nurses is a valuable proposition to cope with attrition, especially given the increasing demand for hospital nurses as an aging U.S. population increasingly relies upon their services (Rowe et al., 2016).

The purpose of this quantitative nonexperimental survey study was to test the social exchange theory (Emerson, 1976) that relates to the reciprocity between human actions and behaviors. The theory was applied in evaluating the effect of job-related stress and burnout (independent variables) on turnover intention (dependent variable) of hospital nurses in Dallas, Texas. Throughout the study, *job-related stress* refers to the psychological condition of feeling emotionally and physically exhausted from work, *burnout* refers to the feeling of detachment and indifference toward one's work, and



*turnover intention* refers to thoughts of seeking to separate or leave the employment relationship. The present study also involved testing the effect of two additional variables on the relationship between job-related stress and burnout: flexible working arrangements and employee empowerment (moderating variables). Throughout the study, *flexible working arrangements* refers to the formal arrangements between employer and employee concerning working hours and job completion, and *employee empowerment* refers to the set of actions taken by an employer to enable employees to perform their job better.

This chapter begins with an overview of the study, followed by the background of the study and the problem statement. The problem statement precedes the purpose of the study and the research questions, which are derived from the theoretical framework. Also included in this chapter are the nature of the study and the key definitions, followed by the assumptions made for the study, the scope and delimitations, the limitations, and the significance of the study. Chapter 1 concludes with a summary of the key points of the chapter and the study.

### **Background of the Study**

*Voluntary turnover* is employee-driven termination of employment or, simply put, when employees quit their job. To some degree, voluntary turnover is a necessary component of the employment cycle, with employees retiring, choosing to leave a profession, or needing to quit because of personal circumstances such as leaving the workforce to start a family or because of significant injury (Lazear & McCue, 2018). On balance, such factors are not the sole cause of voluntary turnover. Regardless, turnover in

the U.S. nursing sector is high and rising (Richardson, 2018). The year 2017 saw a 10-year high in nurse turnover (Nursing Solutions, 2018b), with no sign of the problem having abated significantly since. Furthermore, a positive association exists between turnover for hospital nurses and leaving the nursing profession (Lo et al., 2018a).

As voluntary turnover has increased because of an aging workforce in recent years, the need to identify ways to prevent unnecessary turnover has become increasingly acute (Clendon & Walker, 2016). Researchers in the existing literature have identified several factors to help reduce nursing turnover, which include job sharing, shorter shifts, no night shift, and greater appreciation for nurses' work efforts (Clendon & Walker, 2016). Various literature sources cited mental health issues such as job-related stress and psychological burnout as factors that contribute to the high turnover rate among nurses (Chen et al., 2020; Whittaker et al., 2018a; Zhang et al., 2020). Even though occupational stress is common regardless of the profession, nurses appear to be more prone to job-related stress compared to other professionals (Dagget et al., 2016). Different contextual and individual factors contribute to the stress of nurses. As Sarafis et al. (2016) found, experiences with death, the relationship with patients and their families, conflicts with leaders, and uncertainty all contribute to stress among nurses. Job-related stress may also impair nurses' ability to do their jobs well (Andresen et al., 2017).

Similar to job-related stress, burnout is a common experience for many nurses because of the nature of their job (Khamisa et al., 2016). Burnout is particularly common among nurses who have longer working experience and those who have adopted a passive coping style (Yu et al., 2016). As with job stress, nurses who experience burnout

have greater difficulty effectively carrying out their jobs (Khamisa et al., 2016).

Therefore, it is not surprising that burnout is a significant antecedent of turnover in nurses (Boamah & Laschinger, 2016).

Given that both job-related stress and burnout occur at higher rates among nurses because of the rigor of their jobs, approaches offering greater flexibility in employment conditions may be a key protective factor against burnout. There is empirical support for the benefits of a flexible working environment on the well-being and work outcomes of nurses (Oates, 2018; Pisanti et al., 2016). For instance, Oates (2018) found that the ability to balance work and life influences the subjective well-being of nurses. Oates also indicated that subjective well-being relates positively with flexible working hours. Other researchers suggested different strategies. Pisanti et al. (2016) found that changing the job characteristics or job contexts of nurses can be a buffer to experiencing burnout by explaining about 3%–20% of variance within a 14-month period.

Although these results are promising, there remains a considerable gap in the literature. Current research offers some evidence in favor of flexibility, but the researchers did not directly test the effects of flexible working conditions on turnover. Furthermore, researchers have noted the need for further research into how management practices can decrease turnover (Onnis, 2017), especially in combination with other key predictors such as burnout (Brook et al., 2018; Whittaker et al., 2018). The combination of management strategies and existing conditions represents a key research gap. Therefore, the relationship between job stress, burnout, turnover intention, and flexible work arrangements needed examining.

## **Problem Statement**

Despite active efforts by health care leaders to retain nurses, the turnover rate among nurses remains high in the United States (Richardson, 2018). Researchers at Nursing Solutions (2018) reported the highest mean turnover rate of hospital nurses of 18.7% in 2017. The Bureau of Labor Statistics (2017) projected a shortfall of 1.1 million additional nurses by 2030. Whittaker et al. (2018) reported that stress and burnout positively relate with the high turnover rate among nurses. In terms of management-related factors that contribute to turnover intention among nurses, lack of flexibility in the workplace and lack of empowerment through support are major issues, and these factors result in widespread turnover in many health care institutions in the United States (Berridge et al., 2018; Dhaini et al., 2018).

Many nurses do not have flexible work schedules, which limits their ability to control and plan their own work shifts (Dhaini et al., 2018). The general management problem is that the efforts to decrease the turnover of nurses remain ineffective, which underscores the need to investigate the role of management practices in addressing the retention of nurses (Onnis, 2017; Whittaker et al., 2018). The specific management problem is the high turnover rate of nurses in Dallas, Texas, because of stress and burnout.

The goal of conducting this study was to examine the relationship between the independent variables, job-related stress and burnout, and the dependent variable, turnover intention. An additional goal was to study how flexible work arrangements and employee empowerment moderated the relationship. In a related study of nurse turnover,

Brook et al. (2018) argued that more effective management approaches were necessary to reduce nurse turnover.

### **Purpose of the Study**

The purpose of this quantitative nonexperimental survey study was to test the social exchange theory (Emerson, 1976) that relates to reciprocity of actions and behaviors. Within the study, I applied the theory to evaluate the effect of job-related stress and burnout (independent variables) on turnover intention (dependent variable) of hospital nurses in Dallas, Texas.

The study design consisted of online data collection from 165 hospital nurses in Texas on the SurveyMonkey portal. This study is significant because the results contribute to existing empirical evidence concerning the relationship between the main variables of the study. New empirical evidence emerged from evaluating the moderation of flexible working environments and employee empowerment from a management perspective, managers can use the results of the study to develop additional strategies to offset the turnover intention of nurses.

### **Research Questions and Hypotheses**

Based on the problem and the purpose identified, the quantitative research questions and their corresponding hypotheses were as follows.

RQ1: What is the predictive relationship, if any, of job-related stress on the turnover intention of nurses?

$H_{01}$ : The level of job-related stress is not a statistically significant predictor of the turnover intention of nurses.

*H<sub>a1</sub>*: The level of job-related stress is a statistically significant predictor of the turnover intention of nurses.

RQ2: What is the predictive relationship, if any, of burnout on the turnover intention of nurses?

*H<sub>02</sub>*: The level of burnout is not a statistically significant predictor of the turnover intention of nurses.

*H<sub>a2</sub>*: The level of burnout is a statistically significant predictor of the turnover intention of nurses.

RQ3: What is the interaction effect, if any, of job-related stress and flexible working environment on the turnover intention of nurses?

*H<sub>03</sub>*: Flexible working environment does not moderate the relationship between job-related stress and the turnover intention of nurses.

*H<sub>a3</sub>*: Flexible working environment moderates the relationship between job-related stress and the turnover intention of nurses.

RQ4: What is the interaction effect, if any, of job-related stress and employee empowerment on the turnover intention of nurses?

*H<sub>04</sub>*: Employee empowerment does not moderate the relationship between job-related stress and the turnover intention of nurses.

*H<sub>a4</sub>*: Employee empowerment moderates the relationship between job-related stress and the turnover intention of nurses.

RQ5: What is the interaction effect, if any, of burnout and flexible working arrangement on the turnover intention of nurses?

*H<sub>05</sub>*: Flexible working arrangement does not moderate the relationship between burnout and the turnover intention of nurses.

*H<sub>a5</sub>*: Flexible working arrangement moderates the relationship between burnout and the turnover intention of nurses.

RQ6: What is the interaction effect, if any, of burnout and employee empowerment on the turnover intention of nurses?

*H<sub>06</sub>*: Employee empowerment does not moderate the relationship between burnout and the turnover intention of nurses.

*H<sub>a6</sub>*: Employee empowerment moderates the relationship between burnout and the turnover intention of nurses.

### **Theoretical Framework**

Emerson's (1976) social exchange theory served as the basis of the theoretical framework of the study. The main tenet of this theory is that appropriate use of power flows from managers through the exchange of resources related to the behaviors of the subordinates (Emerson, 1976). From this overarching perspective of the social exchange theory, humans tend to respond positively to affirming actions, which underscores the interactive relationship between the actions of the giver and the response of the recipient (Cropanzano et al., 2016).

In response to using social exchange theory as the theoretical framework, there is empirical support that the behaviors of management leaders can influence the behaviors of employees (Reader et al., 2017; Zhou et al., 2017). For instance, Reader et al. (2017) used the social exchange theory to frame how organizational support from managers

influences the safety citizenship behaviors of employees. Researchers such as Zhou et al. (2017) also used the social exchange theory to support the effect of leader impression management on employee voice behavior, based on the mediated influence of the variables trust and suspicion.

Researchers have successfully applied social exchange theory to test the relationship between employees' ability to cope at work in response to the actions of the management. Aryee et al. (2015) examined the relationship between procedural justice and job performance using the social exchange theory and found that the ability of managers to fulfill the needs of employees mediated the influence of organizational justice on the intrinsic motivation of employees and their trust in their organizations.

In this quantitative nonexperimental research study, I posited that leaders could develop positive relationships with nurses through empowering employees and providing flexible working environments. Using the social exchange theory (Emerson, 1976) as the rationale, the hypothesis of this study was that leaders who empower their employees and provide flexible a working environment would moderate the relationship between job-related stress and burnout on the turnover intention of nurses. As has been noted, I applied the social exchange theory to test how flexible work arrangements and employee empowerment moderated the relationship between the independent variables, job-related stress and burnout, and the dependent variable, turnover.

### **Nature of the Study**

I used a quantitative approach for this study, focusing on a statistical examination of relationships between two or more related variables. Researchers who conduct



quantitative studies focus on the positivist approach wherein the assumption is that constructs are observable and measurable, which makes possible the scientific examination of a phenomenon (McCusker & Gunaydin, 2015). Quantitative research relies on inferential statistics to make conclusions about the relationships of variables (McCusker & Gunaydin, 2015). The quantitative approach was appropriate for this present study for several reasons. The study was relational. Although the variables under study were not inherently quantitative, they were bounded by theory. The variables were quantifiable using existing instrumentation. The statistical power afforded by a quantitative approach was valuable given that the intention of the study was to create empirically strong results with implications for social change. Regression was considered the appropriate statistical tool for analysis.

Regression analysis involves examining an independent variable predicting the variations in a dependent variable (Schroeder et al., 2016). Regression was appropriate for this study because the study involved examining whether the independent variables, job-related stress, and burnout, predicted the turnover intention of nurses. Moderation, using flexible work arrangements and employee empowerment, involves examining how the interaction of two independent variables (one predictor and one moderator) affects the values of a dependent variable. The study design was suitable for examining randomly sampled hospital nurses in Dallas, Texas, and I analyzed the results using regression studies. Further details on the nature of the study are available in Chapter 3.

## Definitions

Several key terms feature extensively within this study. Central among the key terms are the study variables.

*Burnout:* Burnout represents a state of work-related mental exhaustion in which a person has put too much effort into work-related tasks and finds him or herself becoming disaffected and unable to fully engage with work. Nurses are particularly prone to experiencing burnout due to a number of factors, including poor pay (Yoo et al., 2016), long work hours (Paul et al., 2018), challenging work conditions arising from a short-staffed workforce (Boamah et al., 2017), and the heavy emotional toll associated with working in the nursing profession (Salvarani et al., 2019).

*Employee empowerment:* Employee empowerment involves giving employees the power to make decisions regarding their work and can boost employee motivation and job satisfaction, both of which are central factors to a successful retention program (Sergio & Rylova, 2018). Ukil (2016) defined employee empowerment as shifting more decision-making power to employees at the lower level of an organization's hierarchy.

*Flexible work arrangements:* Flexible work arrangements refer to a variety of arrangements through which a person may work outside a traditional schedule (Boamah & Laschinger, 2016). Flexible arrangements may include allowing the amount of work per week or month to vary, allowing partial or total telecommuting work, or allowing employees to determine their own work hours. In this study, the schedule flexibility scale reflected the relative flexibility of employment (Hornung et al., 2008), which consisted of three constraints (Rosen et al., 2013).

*Job-related stress:* Job-related stress is stress that relates to specific aspects of a person's job. Job-related stress can take many forms, but primarily includes a focus on stressors directly related to work activities. Because nurses routinely deal with experiences with death, workload, and treatment uncertainty, they tend to experience high levels of job-related stress (Sarafis et al., 2016). Conflicts with leaders and maintaining relationships with patients and their families may represent additional stressors for nurses (Sarafis et al., 2016).

*Turnover:* Turnover refers to the loss of an employee from an organization (Lazear & McCue, 2018). Turnover may take several forms, including voluntary (i.e., quitting) and involuntary turnover (i.e., getting fired). This study concerned voluntary turnover as chosen by employees rather than involuntary turnover.

*Turnover intention:* Turnover intention refers to the intention to quit one's job (Whittaker et al., 2018). Turnover intention is distinct from actual turnover in that, being only an intention, it does not always lead to turnover. Turnover intention represents a more functional variable to study because capturing actual turnover requires time-lagged data collection and the request of potentially sensitive employee information from organizations.

### **Assumptions**

Assumptions are foundational aspects of a study (Bell et al., 2018). These assumptions prove difficult to test, either at all or reasonably within the framework of the research (Bell et al., 2018). There are assumptions inherent in all research, whether qualitative or quantitative in nature (Bell et al., 2018). Accordingly, assumptions

underlaid this study. One key assumption was that quantitative research can offer meaningful insight into the issues under study, namely the linkages, if any, between job-related stress, burnout, and turnover intention, as well as the role of flexible work arrangements. A large body of existing literature with a similar methodological lens supported this assumption of the insightfulness of a quantitative approach. Although this assumption regarding insightfulness of quantitative approach did not prove that quantitative research is a meaningful way to address these issues, it did offer sound reason to assume appropriateness in such an inquiry.

A second assumption was that the study participants would respond completely and truthfully to the surveys used to collect data in the study. Such truthfulness remains unverifiable, and for this reason, I assumed it held true to provide a basis for examination. Appropriate measures ensured participants had no reason to provide untruthful answers. The informed consent form ensured complete anonymity during data collection, including blacking out participant email addresses. Participation in the study was voluntary. With these efforts, there was little reason participants would feel unable to be truthful in their responses. A third assumption of this study was that the instrumentation used represented an adequate proxy for the underlying variables. The instrumentation and validity sections of Chapter 3 contain the justification for these assumptions.

### **Scope and Delimitations**

The scope of a study represents the focus and extent of a study (Bell et al., 2018). In contrast, the delimitations of a study represent the bounding of the study's scope. Bounding shows deliberately imposed limitations, such as county, city, or profession. In

alignment with the problem studied, and the purpose of the study, the scope of the study was to examine the relationship between job-related stress, burnout, and turnover intention and to determine if flexible work arrangements and employee empowerment moderated this relationship. The scope also included the specific target population, which was nurses. There were several reasons for choosing this population. Turnover intentions account for different factors among different professions, which makes it pertinent to delimit the study to a professional context. The context of nursing is an especially relevant focus for studying the predictors of turnover because nursing suffers from a high turnover rate (Richardson, 2018). Turnover for professions requiring specialized training is especially costly for employers. Costs of health care may have social change implications, such as communities' access to affordable health care. Delimiting the study to nurses in hospitals served a dual purpose. The workplace stressors for hospital nurses and nurses operating in less (or more) stressful medical office contexts may differ. Other reasons include the feeling that hospital nurses represent a more centralized population who are more accessible through the central authority of the hospital. The localized geographic context of Dallas, Texas, was a delimitation imposed upon the scope to narrow the population further and because of convenience, which allowed me to carry out the study more easily. Finally, the study participants had at least a full year of professional working experience as nurses. This delimitation served to ensure the data were relevant to a specific population.

## **Limitations**

Limitations are weaknesses of a study (Bell et al., 2018). Whereas the delimitations represented deliberate boundaries imposed by me, limitations are limits upon a study because of methodological constraints (Bell et al., 2018). Hence, limitations are essentially inherent in the study design and not easily avoided. In most cases, limitations arise from the methodology, but limitations can also arise conceptually. As with any research, this study suffered from several limitations. The first of these limitations was the limitation of the nonexperimental design. As outlined briefly in the Nature of the Study section above and in greater depth in Chapter 3, the nonexperimental design was most appropriate because the experimental approach would have been unsuitable for the variables under study. Nonetheless, such a design has weaknesses, namely that it can only establish correlation or association, not causality. This means that the relationships between variables are not as strong as they otherwise would be. Still, nonexperimental research can highlight functional predictive relationships examined for underlying causality.

A second limitation was the use of self-reported data. Self-reported data always contain the possibility of bias or falsehood, meaning that they are not perfectly trustworthy. Self-reported may contain bias. Therefore, it was important that the variables under study were evaluated using self-reported data because burnout, turnover intention, and other key factors are internal to an individual, and it is not possible to observe or assess these variables from the outside. The design of the study ensured the data were as accurate as possible, including voluntary participation and anonymity for the participants.

A third limitation of this study was that the results, through the delimitations outlined in the previous section, were not universal, but rather drawn from the relatively limited context of hospital nurses in Dallas, Texas. These delimitations were appropriate for the reasons discussed above, but because of them, the results may not generalize as broadly as would be expected.

### **Significance of the Study**

Findings from this study have potential significance to advancing theory. Using social exchange theory (Emerson, 1976) in this study permitted the assignment of values used to evaluate the hypothesized relationships. There is evidence in peer-reviewed studies to support the choice of theory under similar studies. The study can provide opportunities for future extending work on other potential latent factors affecting turnover intention of nurses. I employed a moderated model on two potential latent factors.

The study had significance through its contribution to the development of theory. The study was an opportunity to test relationships between factors through using social exchange theory (Emerson, 1976). The premise of the social exchange theory is the reciprocity of actions and behaviors between individuals, which was appropriate as a basis of the study. Another benefit is that other scholarly work may incorporate the use of social exchange theory to test similar relationships. This can strengthen the theory by adding to the body of existing literature. Alternatively, new findings may reveal the limits of the theory. In terms of scholarly work, the study addressed the specific gap in the

literature concerning the unknown effect of moderating factors on the relationship between burnout, job-related stress, and turnover intention (Onnis, 2017).

I used the moderated model to help evaluate how flexible work arrangements and employee empowerment affect the relationship between burnout and job-related stress on turnover intention. Workplace wellness issues have gained credence and focus in recent literature. The study relationships may find applications beyond the confines of this study population and help promote improved working environments in highly stressful jobs.

The other significance of this study is that applications of the findings may lead to advances in health care practice. I expect the outcome of this study to make a significant contribution to a health care problem. Research outcomes may extend existing knowledge on factors that moderate relationships leading to turnover intention among nurses. Giving health care managers tools for managing nurse turnover has practical significance through its contributions to managing nursing practice. The research gap arose from the work of several researchers. Onnis (2017) conducted a qualitative study to examine the effect of management practices on the sustainability of health care institutions, and the study revealed that ineffective management practices affect health care management, including retention. Hence, Onnis called for more research into the role of management practices on nurse retention. This study answered Onnis's call for research by considering flexible work options as a moderator for predicting turnover intention.

Using a different methodology, Whittaker et al. (2018) conducted a qualitative ethnographic study to explore the role of stress and burnout that led to the turnover of many nurses. Their results highlighted the importance of burnout as a driver of nurse



turnover. Hence, Whittaker et al. called for more research on factors that may minimize the effects of burnout. Brook et al. (2018) conducted a systematic review to examine the viable strategies to address the high turnover rate among nurses. The results of the data analysis revealed many strategies for reducing turnover. The results also revealed an ongoing need for more research into factors that protect against turnover. This study answered Brook et al.'s call for research by considering flexibility as a protective factor. Practically speaking, the significance of this study derives from the potential utility of its results in combatting burnout. The results of this study revealed that flexible work arrangements can decrease the likelihood of job-related stress and burnout leading to turnover. The results also revealed the interactive effect of employee empowerment on the relationship between burnout and turnover intention. Health care managers may apply the new knowledge to real-world nursing practice and hospital management. Such practically applicable results are necessary because hospitals show persistence of a high turnover rate in the United States (Richardson, 2018). The year 2017 had the highest rate of attrition among hospital nurses (Nursing Solutions, 2018). The high turnover rate contributed to a shortfall of 1.1 million nurses (Bureau of Labor Statistics, 2017). Developing effective retention strategies can help address this problem by stemming the loss of nurses, thereby removing some of the need to train and hire new nurses who may not be available.

In terms of costs, there is evidence that retaining nurses can result in significant savings to the hospitals for which they work. During health care challenges such as the coronavirus disease 2019 (COVID-19) pandemic, health care systems already burdened

by strain on resources could ill afford turnover. An Australian study of primary care nurses conducted by Zhao et al. (2018) indicated that costs of nurse personnel significantly exceeded those of other health care staff in the study. Additionally, the study revealed that, as turnover increased, so did health care costs. The results highlighted the importance of managing costs of health care through lower turnover rates. Falatah and Salem (2018) concluded that more research was necessary to help curb nurse turnover costs in Saudi Arabia. In sum, although researchers had conducted a lot of research, more knowledge can lead to new strategies that health care managers can put into practice.

Results of this study have potential significance to social change. The COVID-19 pandemic demonstrated that communities could experience limited access to regular health care. Communities and especially older adults, the sick, and the young may be affected most in such events. The availability of trained, empowered nurses is important to society. Nursing in society is significant to social change. Conducting this present study helped answer the call for more research by addressing flexible work options and employee empowerment as potential moderating variables. A moderating variable can have a strengthening or weakening effect on a linear relationship.

Given the broad scope of the problem and the importance of nurses to the medical profession and to society, this study also had significance for positive social change. The results of the study can help address the nurse shortage by examining a potential strategy to reduce turnover. Study results indicated that flexible working arrangements help reduce turnover intention affected by job-related stress. However, flexible working arrangements were less influential on turnover intention affected by burnout. Managers

and administrators can better respond to challenges faced by nurses by improving their understanding of factors contributing to turnover. Extending studies will help build the body of managerial knowledge necessary to protect against the social consequences caused by worsening nurse shortages. Societies depend on the health care services within their communities. Stable, healthy work environments create conditions for satisfied committed employees and stable working communities. The aging U.S. population means that medical services will become increasingly necessary (Rowe et al., 2016). Societies also need a stable nursing workforce to meet the challenges of new diseases and pandemics that may place unusual demands on the ability to provide adequate caregiving in hospitals.

### **Significance to Theory**

Social exchange theory (Emerson, 1976) provided the framework for testing possible relationships between variables used in this study. Studies that apply theoretical frameworks offer opportunities to test or even challenge those theories. An evaluation of the strength of the theory as used in the study is explained in the data analysis and results sections in Chapter 4. The findings add to the existing body of knowledge regarding the efficacy of the social exchange theory. In essence, testing the relationship provided an opportunity to strengthen the theory and to challenge it in new ways.

### **Significance to Practice**

The potential contribution of the results of this study has been discussed in terms of the possible advances in the practice of health care services. Nurse turnover has received a lot of attention in scholarly publications. From a practitioner standpoint, such

interest exists for many reasons. One such reason is the disruption to services and inconvenience to patients when staffing levels are affected. The need to hire new nurses to replace those lost through turnover causes financial strains, as noted by Van Camp and Chappy (2017), who discovered that the cost of replacing a nurse was 120% of the cost of their hiring. Although it was not the focus of the study, health care managers also face stresses resulting from constantly looking for more human resources. It makes sense to expect health care managers to cooperate with scholars in applying new knowledge to reduce turnover rates among nurses. From a practical viewpoint, health care managers can benefit from such knowledge. When health care managers find strategies that they can implement to lower turnover, they may be willing to collaborate in additional research. Support can be found in a study by Daniels et al. (2019) in which the authors proposed models for increasing collaboration between scholars and practitioners. Practitioners can supply valuable feedback for extending research.

### **Summary and Transition**

In summary, the problem is that, despite active efforts by health care leaders to retain nurses, the turnover rate remains high and prevalent in the United States (Richardson, 2018). To address this problem, this quantitative nonexperimental regression study involved evaluating the relationship between job-related stress, burnout, and turnover intention. The study also helped to determine whether flexible work arrangements and employee empowerment moderated these relationships. A moderation study tests an additional factor's influence on independent variables' interaction with a dependent variable (Baron & Kenny, 1986). I developed six research questions in this

study: (a) What is the predictive relationship, if any, of job-related stress on the turnover intention of nurses? (b) What is the predictive relationship, if any, of burnout on the turnover intention of nurses? (c) What is the interaction effect, if any, of job-related stress and flexible working environment on the turnover intention of nurses? (d) What is the interaction effect, if any, of job-related stress and employee empowerment on the turnover intention of nurses? (e) What is the interaction effect, if any, of burnout and flexible working environment on the turnover intention of nurses? and (f) What is the interaction effect, if any, of burnout and employee empowerment on the turnover intention of nurses? I used a quantitative nonexperimental method to answer the questions within the theoretical framework of social exchange theory (Emerson, 1976). The present study has practical significance in helping to address the problem of high nurse turnover rates and has academic significance through addressing a noted research gap. Given the important role played by nurses within health care services, improving nurse retention contributes to positive social change by improving the quality and availability of nursing care.

Chapter 1 comprised an introduction to the study and an overview of its components. Chapter 2 is the literature review and serves to build on the information presented in the background, problem statement, theoretical framework, and significance of the study sections. The chapter includes in-depth discussions of the variables and the theoretical framing of social exchange theory (Emerson, 1976). Chapter 2 contains further development of the research gaps and significance of the study through a review of current literature.

## Chapter 2: Literature Review

### **Relevant Literature**

There is a considerable amount of research citing employee retention as one of the most pressing challenges that organizations face, even as employee turnover forces hospitals to spend more money and time in recruiting and training new hires (Deepa & Resmi, 2017; Haladay et al., 2017; Sergio et al., 2017). Nurse's experience one of the highest turnover rates not only in the health care professions but overall due to high mental health issues such as high levels of job-related stress and burnout (Whittaker et al., 2018). Nurses are more prone to experiencing job-related stress and burnout due to the physically and emotionally challenging nature of their profession, which frequently involves exposure to patient death, high workloads and low pay, change, and uncertainty over the effectiveness of their patients' treatment plans (Dagget et al., 2016). It is important to learn how to manage nurses' job-related stress and burnout. It is also crucial to understand the ramifications these factors have on the functioning of the health care system.

High nurse turnover rates have significant implications on the quality of patient care and on the general efficiency of the health care system. For greater context, the number of nurses relative to the U.S. population is relatively small, with only 2.8% of the population working as registered nurses in the U.S. health care system in 2014 (Bureau of Labor Statistics, 2017). Nurses often face pressure in their line of work because of staffing shortages, and more research can elicit factors that influence nurse retention rates.

The average turnover rate of nurses working in hospitals was 18.7% in 2017, which was the highest turnover rate in a decade (Nursing Solutions, 2018). Previous research demonstrated that this high turnover rate was related to factors such as lack of workplace flexibility and lack of employee empowerment (Berridge et al., 2018; Dhaini et al., 2018). Health care management efforts to decrease nurse turnover rates have remained ineffective (Onnis, 2017; Whittaker et al., 2018), and a need has existed for further research on the role of management practices on nurse retention. This study included an investigation into the moderation effect that employee empowerment and flexible working arrangements can have on the relationship between job-related stress, burnout, and turnover intention. The problem that this study addressed is the relationship between job-related stress and burnout and turnover, and how flexible work arrangements and employee empowerment moderate these factors.

Researchers have pointed to flexible work arrangements and employee empowerment as examples of management strategies that organizations can employ to increase retention rates (Taylor et al., 2017; Zhang et al., 2018). A literature review conducted by Kohli and Sharma (2017) on the relationship between employee empowerment and job satisfaction found strong empirical evidence of a positive relationship between employee empowerment and job satisfaction in diverse sectors. Examples of such sectors included banking, public safety, hospitality, and education. A gap remains in the literature regarding what the most effective management strategies are for addressing high nurse turnover rates (Brook et al., 2018). Schedule inflexibility, a lack of empowerment, and a lack of support all relate to mental well-being and are issues

that result in high rates of nurse turnover (Berridge et al., 2018; Dhaini et al., 2018). For example, nurses without flexible work schedules are often unable to plan their work shifts, fail to achieve a favorable work–life balance, and are more likely to leave the profession (Dhaini et al., 2018).

One of the main obstacles facing hospitals is that the efforts of managers to reduce turnover rates are ineffective, which highlights the importance of conducting further research on the role of management practices in nurse retention (Onnis, 2017; Whittaker et al., 2018). By addressing this issue in this study, I have extended knowledge about the relationship between managers and their employees more generally by producing empirical data on how better management practices can reduce employee turnover. The purpose of this study was to examine the relationship between job-related stress and burnout and the dependent variable turnover intention to determine whether flexible work arrangements and employee empowerment moderate this relationship.

The following online databases and search engines were useful for finding sources for the literature review: Google Scholar, PubMed, JSTOR, ScienceDirect, Educational Resource Information Center (ERIC), and EBSCOhost Online Research Databases. The following search key terms helped to generate results: *nurse turnover*, *nurse burnout*, *nurse job-related stress*, *social exchange theory*, *employee empowerment and job retention*, *flexible work arrangements and job retention*, *management and job retention*, *nurse retention*, and *mental health and job-stress*. Using these keywords both individually and in combination generated relevant studies for the literature review.



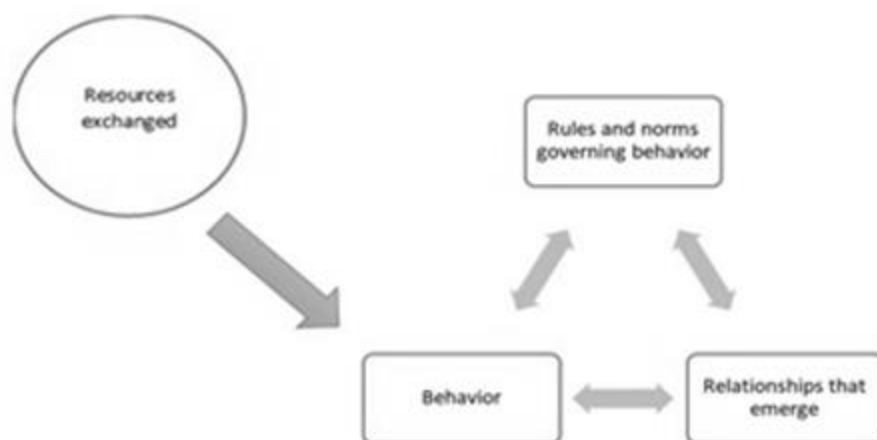
Eighty-two sources published between 2016 and 2020 provided the most up-to-date research. The research on the links between nurse turnover and job-related stress, burnout, and managerial strategies was relatively recent and is constantly evolving. Sources cited in this chapter published in the past 5 years represented 85% of the citations, while 15% of sources had publication dates earlier than 2016. The theoretical framework used to guide this study, social exchange theory (Emerson, 1976), has roots going back to the 1970s. A review of journal articles helped justify the use of social exchange theory as the theoretical foundation for this study.

This literature review chapter includes an expanded overview of the problem statement discussed earlier, as well as past approaches to solving the problem. Emerson's social exchange theory (1976) served as the theoretical framework to guide the study. Reviewing literature involves categorizing relevant studies into the broad and the more specific. The main topics of the literature review are (a) mental health, job-related stress, and burnout in general; (b) factors affecting nurse turnover; (c) how management strategies can affect employee behavior; (d) evidence of relationships between management strategies involving employee empowerment, flexible work arrangements, and employee retention in the nursing industry; and (e) literature-based arguments for the proposed methodology. The factors affecting nurse turnover include job-related stress, burnout, and turnover intention. Subsections include the context of factors such as employee empowerment and flexible working arrangements to explain the impact they can have on employee retention. The Summary and Conclusions section includes an assessment of the gaps in literature concerning this study.

### **Theoretical Framework**

The theoretical framework guiding the line of inquiry in this study was Emerson's (1976) social exchange theory. This theory centers on the character of interactions that generate obligations between the parties involved (Emerson, 1976). These interactions include a mutually dependent quality, a contingency on the other party's actions, and potential to create meaningful relationships (Cropanzano & Mitchell, 2005). For example, employees' treatment by management may affect their attitude toward their boss. How efficient workers are at their job influences the nature of management's relationship with the workers. In this sense, the relationship between worker and manager is dependent on the other's actions and has the potential to be meaningful.

In social exchange theory, power flows from managers through an exchange of resources and actions to influence the behavior of the subordinates (Emerson, 1976). Employees then reciprocate with appropriate, predictable, corresponding work behaviors. The dynamic relationship between the actions of the giver and the response of the recipient supports the assumption that people respond positively to affirming actions (Cropanzano & Mitchell, 2005). Social exchange theory builds upon three main ideas: rules and norms of exchange, resources exchanged, and relationships that emerge (Cropanzano & Mitchell, 2005). Figure 1 serves as a visual representation of the variables informing social exchange theory.

**Figure 1***Dynamics of Social Exchange Theory*

*Note.* Reciprocity between actions and behaviors

As demonstrated in Figure 1, the rules and norms that govern everyday behaviors make up the premise of social exchange theory. These rules and norms set standards and expectations that dictate how people act and are in turn influenced by these behaviors (Cropanzano & Mitchell, 2005). The norms regulating social behavior also influence the relationships that emerge as a result of this behavior. Resources exchanged between people, such as knowledge or power, also influence behavior.

Researchers in many fields of study, including organizational justice and social power, have applied the social exchange theory (Molm et al., 1999). In this study, I applied a framework to test a health care management challenge to develop a better understanding of how management strategies can moderate the mental health and retention rate of nurses. Previous research has shown the use of social exchange theory to

provide empirical support for the idea that the behavior of leaders can influence employee behavior (Reader et al., 2017; Zhou et al., 2017). For instance, Reader et al. (2017) demonstrated how organizational support from managers can influence the safety citizenship behavior of employees. Using survey data collected from workers in the offshore oil and gas industry, Reader et al., found that safety citizenship behavior was a product of social exchange, which indicated that the safety characteristics of an organization are a direct result of the everyday workforce relations. In a separate study Zhou et al. (2017) illustrated the effect of leader impression management on employee voice behavior, based on the moderating effect of trust and suspicion. In the study, Zhou et al. found that feelings of trust and suspicion that developed during social exchanges between workers and managers influenced the ways in which managers cultivated impressions of their employees. These feelings also influenced the way employees expressed their views in complex situations (Zhou et al., 2017). The way managers interact with their employees can influence employees' opinions about their managers, which in turn will drive employee–manager interactions. As seen in Figure 1, these interactions result in the formation of employee–manager relationships that affect the behavior of both parties.

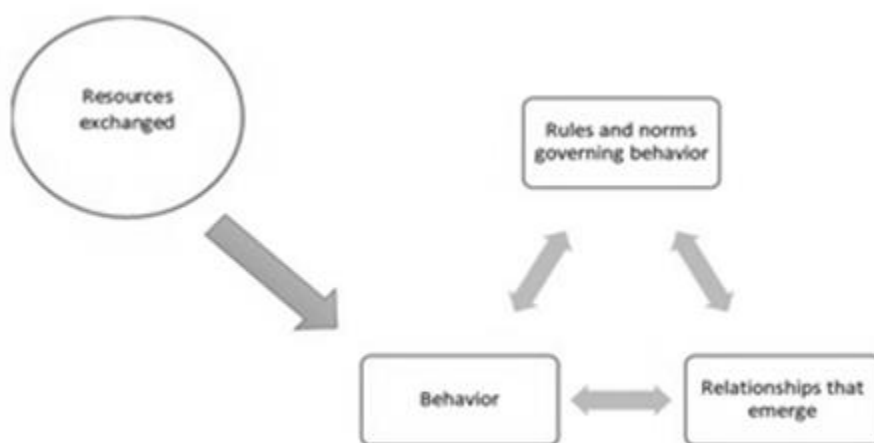
Applying social exchange theory can help to examine how employees cope with the actions of management (Aryee et al., 2015). Aryee et al. (2015) examined the relationship between procedural justice and job performance using social exchange theory. In that examination, Aryee et al. determined that managers' ability to meet the needs of their employees moderates the influence of organizational justice on employees'

intrinsic motivation and their trust in the company. Workers are more likely to trust a company with managers who respond to employee requests and fulfill their needs, whereas managers would benefit from increased employee productivity as a direct result of their behavior.

There has been little empirical evidence using social exchange theory to demonstrate what effects, if any, management strategies can have on employee retention, specifically in the field of nursing (Brook et al., 2018). This study therefore involved exploring and providing insight into the relationship between management strategies such as employee empowerment and job retention. In this study, I investigated whether leaders could leverage strategies facilitating employee empowerment and flexible working arrangements to gain positive relationship with nurses, as illustrated in Figure 2.

## Figure 2

### *Application of Social Exchange Theory on Nurse Turnover*



*Note.* Conceptualizing theory and proposed relationships

Theory can make a significant contribution by testing relationships, adding to knowledge, and contributing to practice. I used the social exchange theory (Emerson, 1976) to test the proposed relationships in this study. The findings of this study may help health care managers become more effective and influential.

### **Review of the Literature**

Despite forecasts that claimed the nursing workforce would grow 16% between 2010 and 2024 (Bureau of Labor Statistics, 2017), high levels of nurse burnout combined with an aging U.S. population continue to contribute to a high demand for nurses and low supply (Paul et al., 2018). Additional factors such as an aging workforce, a lack of graduates going into the nursing field, and an increase in workplace violence within the health care industry highlight the importance of having a well-staffed nursing workforce (Haddad & Toney-Butler, 2019; Paul et al., 2018). Current research highlighted the growing severity of the nursing staffing crisis. Mills et al. (2017) predicted that nurse retention rates would become a global issue by 2030.

High nurse turnover rates can have significant ramifications on health care outcomes and on the functioning of health care institutions such as hospitals, which leads to a few issues that managers might find concerning. As Kurnat-Thoma et al. (2017) pointed out, the forces behind workplace turnover are often fixable, and health care employers who do not adequately assess the implications of turnover rates place their financial interests at risk. Nurse turnover places financial strain on hospitals and other organizations, including costs per employee, as separation, recruitment, and training add expenses to the hospital budget. Some estimates of these expenses exceeded \$64,000

(Park et al., 2016). These high costs indicated that it was in hospital managers' interest to do something about high nurse turnover rates. Also at risk are patient care outcomes, nursing care processes, and the healing environment that a health care facility should have. In a quantitative study on the effect of nurse turnover on health care quality and mortality in California nursing homes, Antwi and Bowblis (2018) found that nurse turnover can have a significant effect on the quality of care, with a 10% increase in nurse turnover resulting in a nursing home receiving 1.8 extra deficiencies on an annual regulatory survey. Additionally, institutions with high nurse turnover rates experienced higher incidences of patient falls, pressure injuries, and medication errors, all of which pose a serious risk to patient health (Kurnat-Thoma et al., 2017; Nelson-Brantley et al., 2018). It is in the interest of both nurses and their employers to address the reasons behind high turnover rates. This chapter contains a discussion of the utility of human resources strategies that can help dissuade nurses from leaving their jobs.

High rates of nurse turnover present a problem to patients, health care managers, health care institutions, and even nurses. Nurses play an important intermediary role in the flow of communication between patient and physician. They also play a crucial role in caregiving and patient recovery. It is important to conduct more research on the factors that cause voluntary nurse turnover. New knowledge may help managers develop more effective methods of retaining their nurse workforce. The remainder of this chapter will address the main factors that influence nurse retention rates. The focus of this study is turnover intention, job-related stress, and burnout. Other focus areas include flexible working arrangements and employee empowerment.

## **Mental Health, Job-Related Stress, and Burnout**

Before examining the literature on linkages between nurse retention, job-related stress, burnout, and management strategies, it was prudent to analyze previous research on the relationship between mental health and job retention more generally. Feelings of job-related stress and burnout are indicators of poor mental health and can contribute toward decreased retention rates across diverse professions such as academia (Castelló et al., 2017), social work (Wilson, 2016), the hospitality industry (Cheng & Yang, 2018), and the health care professions, including nursing (Whittaker et al., 2018). Employees have reported feeling burnout for reasons such as an inability to achieve a favorable work–life balance (Devine & Hunter, 2017), isolation (Brown, 2017), and a perceived lack of support (Khamisa et al., 2016). In a mixed methods study on how emotional exhaustion among doctoral students can contribute to high attrition rates, Devine and Hunter (2017) discovered that work-family conflicts and an inability to achieve a favorable work–life balance were crucial reasons why students felt emotionally exhausted and terminated their degrees.

There is also empirical evidence that isolation and lack of an organizational support system can have negative effects on retention rates. In a 2017 interview study on factors that influenced online doctoral students to persist in their studies, Brown found that a lack of interaction with colleagues and strong feelings of isolation were the reasons most cited for dropping out. Similar trends persist within the nursing sector. Huyghebaert et al. (2019) conducted a cross-sectional research study on the ways perceived social



isolation influences nurse turnover and found that the more socially isolated nurses felt, the more likely they were to leave their job.

Health care professionals, including nurses, face challenges due to the nature of their work. Time constraints, competing demands from various members of the health care team, the challenges of clinical work, a lack of control over work scheduling, and conflicting relationships with management can all contribute to job burnout in health care professionals (Bridgeman & Barone, 2018). For instance, Mosadeghrad (2013) conducted a survey of 296 nurses to examine what occupational stresses nurses experienced and how these contributed to their intention to leave. One third of the surveyed nurses rated their occupational stress as high, citing a high workload, lack of management support, inadequate pay, and staff shortages as reasons for their stress (Mosadeghrad, 2013). Lögde et al. (2018) conducted additional research and concluded that conflicts with leadership, excessive workloads, and an inability to achieve a satisfactory work–life balance due to scheduling demands contributed to nurses' decision to quit their jobs.

Lyndon (2016) estimated that burnout may affect up to 70% of nurses and therefore cause many to quit. Because nurses play a critical role in providing high-quality health care, it is important to understand what factors affect nurse retention in order to maintain the functionality of the American health care system. Literature on nurse retention rates remains limited to specific geographical scopes and sample sizes, with many studies carried out on nurses working within a specific country or even a specific hospital (Dhaini et al., 2018; Lögde et al., 2018; Mosadeghrad, 2013). There existed an opportunity for studying common variables that affect nurse turnover, such as job-related

stress, burnout, and dissatisfaction with management practice. Additionally, researchers have conducted a limited number of studies on a larger, more general scale that have produced similar results (Halter et al., 2017; Khamisa et al., 2016; Paul et al., 2018). Thus, there was a need to examine the factors affecting nurse turnover rates.

### **Factors Affecting Nurse Turnover**

Nurses may leave their jobs for a number of reasons, including low pay, inflexible schedules, and conflicts with management, all of which can contribute to the development of high levels of stress (Paul et al., 2018; Robson & Robson, 2016; Whittaker et al., 2018). This section includes an examination of the different factors that can influence nurse turnover rates and the ways these issues can induce turnover. There has been a need for greater exploration of job-related stress (Dagget et al., 2016) and burnout (Lyndon, 2016; Paul et al., 2018) as key determinants of nurse turnover.

### ***Turnover Intention***

Recent statistics showed that nursing is a highly in-demand career that has one of the highest turnover rates of any profession (Paul et al., 2018). The critical role of nurses in the health care system (Clendon & Walker, 2016) highlights the importance of this study. Many factors can influence the turnover rates of nurses in hospitals, including stress developed on the job (Lo et al., 2018), their mental health (Whittaker et al., 2018), and management policy and behavior (Robson & Robson, 2016).

Researchers have also found that low pay and policies that inhibit a favorable work–life balance can also influence nurse turnover (Paul et al., 2018; Robson & Robson, 2016). In a study on the structural relationships that connect job-related stress and

turnover intention in hospital nurses, Lo et al. (2018) surveyed over 46,000 nurses and found that job stress had a direct effect on job satisfaction and depressed mood, which preceded turnover. Lo et al. also found that job satisfaction and adaptation to stress mediated nurses' perceived feelings of job-related stress. These findings emphasized the important role a favorable work environment has on nurse turnover rates (Lo et al., 2018). Unlike much of the research on this subject, Lo et al.'s study had a large, national-scale sample. The results from their study, therefore, are likely to be more generalizable across the diverse nurse workforce.

Results from research performed by Whittaker et al. (2018) supplement those obtained by Lo et al. (2018). All the nurses surveyed by Whittaker et al. reported that they felt burned out and experienced medium to high levels of moral distress as a result of their profession, thereby indicating that their mental health was suffering. Although Whittaker et al. used an ethnographic methodology, which means the results were not representative of the nurse workforce, the research nevertheless provided an important insight into factors affecting nurses. The ethnographic nature of the research meant that Whittaker et al. could create a more holistic picture of how nurses' mental health can impact their intention to leave their jobs.

Researchers have established a reciprocal relationship between burnout, which they often take as a sign of declining mental health, and turnover intention. Guo et al. (2019) found that turnover intention acted as a strong predictor for burnout among Australian nurses, and those nurses who reported being more resilient exhibited less burnout and turnover intention. Resiliency is an important indicator of mental health

because it represents how well an individual can cope with hardships and challenges (Di Fabio & Saklofske, 2018). The conclusions made by Guo et al. complemented those made by other researchers such as Whittaker et al. (2018) and Lo et al. (2018), who contended that burnout and feelings of negative well-being increased nurse turnover intention. A cyclical relationship exists between nurses' general state of mental well-being and their intention to leave their profession. Research that advances the understanding of mediating factors influencing nurses' mental health would be invaluable for administrators and managers.

Although outside the scope of this study, it was noteworthy that Hong and Lee (2016) discovered a negative correlation between emotional intelligence and job stress, burnout, and turnover intention in a quantitative survey study that tested the structural equation modelling on nurses' turnover intention. The findings indicated that higher levels of emotional intelligence can lead to reduced turnover by lowering nurses' feelings of burnout. In other words, the better individuals are at regulating their own emotions and appropriately responding to the emotions of others, the more likely they are to experience higher levels of subjective well-being, which leads to lower rates of perceived burnout (Sánchez-Álvarez et al., 2016).

When examining the factors affecting nurse turnover intention, it is important to consider the effect that managerial policies and institutional processes can have on nurses. The characteristics of workplace leadership and organizational policies may affect turnover intention (Robson & Robson, 2016), which may emphasize the utility of evaluating strategies used by management and organizations to help improve nurse

retention. Robson and Robson (2016) carried out a quantitative study on 433 nurses to examine the relationships between affective commitment, intention to leave, and workplace experiences. Specifically, they wanted to determine if perceived organizational support and characteristics of leader–member exchange influenced nurses' intention to leave their jobs.

Findings supported Robson and Robson's (2016) hypothesis that perceived organizational support significantly influenced intention to leave and the nature of exchange between managers and employees. These findings therefore indicated that negative perceptions of one or both factors would result in a higher desire to leave (Robson & Robson, 2016). Although the focus of Robson and Robson's study was nurses working within the United Kingdom, they study involved a relatively large sample size and included quantitative methods. The researchers helped to compute the existence of a statistically significant relationship between the variables intention to leave, perceived organizational support, and leader–member exchange. The results were indicative of the larger nursing population, particularly in the United Kingdom.

There is a large body of literature on the factors potentially affecting nurse turnover intention. In general, stress experienced while on the job (Lo et al., 2018), nurses' mental well-being (Whittaker et al., 2018), and nurses' relationship with the upper echelons of management (Robson & Robson, 2016) have a significant connection to nurse turnover rates. High levels of stress can compound with feelings of burnout to compel nurses to leave the profession (Whittaker et al., 2018). Conflicts with management and an unsupportive work environment can also cause nurses to view their

jobs in an unfavorable light (Robson & Robson, 2016). Some possible strategies for reducing nurse turnover include introducing shorter shifts, job sharing, and providing a greater show of appreciation for nurses' efforts (Clendon & Walker, 2016).

The literature surveyed represents a wide range of research designs, from large-sample quantitative studies to small-scale ethnographic investigations. Large-scale quantitative studies such as the one conducted by Lo et al. (2018) produce generalizable results, whereas ethnographic research such as that carried out by Whittaker et al. (2018) produces more in-depth results that support conclusions backed up by statistical analysis. There is a need for a closer examination of the factors acknowledged as significantly impacting nurse turnover intention. In the following sections, I turn to a discussion of the factors affecting nurse turnover intention, specifically job-related stress, burnout, and management actions.

### ***Job-Related Stress in Nurses***

Researchers have found that nurses are prone to experiencing job-related stress (Dagget et al., 2016). In a cross-sectional study that examined the predictors of job-related stress among 314 nurses in southwest Ethiopia, Dagget et al. concluded that nurses were more likely to experience stress as a result of their profession due to factors such as exposure to death, workload, and uncertainty regarding the treatment of their patients. In a study conducted among Greek nurses by Sarafis et al. (2016), experiences with death and treatment uncertainty contributed to the job-related stress nurses reported experiencing. Sarafis et al. also identified conflicts with health care managers and maintaining relationships with patients and their families as additional contributors to

job-related stress. Andresen et al. (2017), using the results of a quantitative survey study, found that work stress influenced mental well-being. These findings indicated that a less stressful work environment is a positive predictor of job satisfaction, and job satisfaction positively relates with life satisfaction.

Some of the studies reviewed had a small geographical scale and used a small sample size, which places limitations on the ability to generalize the results, especially when compared to studies that took place in other countries. For instance, Andresen et al. (2017) surveyed a sample of 498 Norwegian nurses to examine the relationship between job satisfaction, stress experienced while on the job, and intention to change jobs. The study was unique in that Andresen et al. compared their results to those obtained from a control group composed of workers in other occupations with an education level similar to that of a nurse, which increased the internal validity of the results.

Although Andresen et al. (2017) found that nurses' mental well-being had a positive correlation with their job satisfaction (nurses with higher reported mental well-being also reported feeling more satisfied with their jobs), the majority of nurse participants reported feeling more satisfied with their jobs and lives than the other careers. The findings deviate from much of the evidence in literature. Other researchers who examined nurses' mental well-being and job satisfaction found that negative perceptions of mental health and negative perceptions of working as a nurse go together (Lo et al., 2018; Whittaker et al., 2018). Lo et al. (2018) conducted a study with a large sample population and found a direct correlation between job stress, job satisfaction, and depressed mood, whereas Whittaker et al. (2018) reported that all the nurses they

surveyed felt dissatisfied with their job and that their mental health had suffered because of it. The results from the Andresen et al. study indicated that differences in demographics and geographic location can have a strong influence on research outcomes. For example, Andresen et al (2017) noted in their conclusion that Norwegian nurses are often able to work with managers to set their schedules and enjoy a quality of life that is generally higher than that of non-Norwegian nurses.

Job-related stress can have a significant impact on nurses' ability to carry out their duties effectively (Andresen et al., 2017; Sarafis et al., 2016). For example, Sarafis et al. (2016) identified a negative association between work stress and the caring behavior of nurses that limited nurses' ability to be fully present in their work. Because nurses often play vital roles in the health care team and have frequent contact with their patients, it is crucial for patient safety that nurses be fully present and engaged in their work.

The idea that high levels of job-related stress led to high levels of nurse turnover is prevalent throughout the literature. To determine how job-related stress affects nurses, a direct relationship between job-related stress and the intention of a nurse to leave has needed investigating. In addition to confirming the existence of a direct connection between job-related stress and turnover, Lo et al. (2018) found other pathways linking job stress to intention to leave: (a) job stress influenced both job satisfaction and feelings of depression, which in turn affected intention to leave, and (b) job stress affected job satisfaction and good stress adaptation could mitigate mood. Lo et al. also found that the intention to leave the hospital under study directly preceded exiting the profession. The researchers concluded that these alternate pathways to turnover resulted in 55% of the



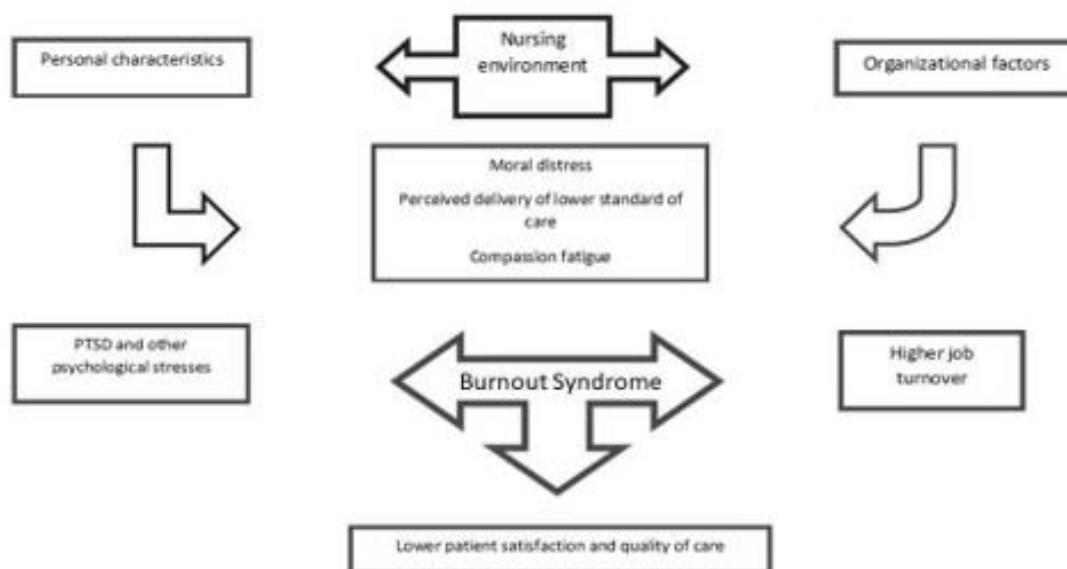
variance in their data, which indicated that the jump from experiencing job-related stress to leaving the nursing profession was not direct (Lo et al., 2018). Mosadeghrad (2013) conducted a cross-sectional study on the characteristics of occupational stress in Iranian nurses and found that one third of the 296 nurses surveyed reported experiencing high levels of occupational stress, with 35% of all respondents saying they intended to leave their job. Although the sample size of the study was small, the high percentage of participants who reported both high levels of stress and intention to leave their job indicated the existence of a positive trend between job-related stress and turnover among nurses.

Researchers have carried out several studies on diverse sample populations to investigate the linkages between job-related stress and turnover in the nursing industry. Researchers who conducted in diverse locations such as Ethiopia (Dagget et al., 2016), Greece (Sarafis et al., 2016), and Iran (Mosadeghrad, 2013) have demonstrated that nurses experience high levels of occupational stress that has a direct correlation with intention to leave their job or the nursing profession altogether. Nurses are particularly prone to experiencing stress while on the job for several reasons, including frequent exposure to death, high workloads, uncertainty regarding the effectiveness of the treatments they administer, and conflicts with leadership issues (Dagget et al., 2016). Therefore, nurses find their ability to effectively carry out their duties compromised (Andresen et al., 2016). For example, nurses who report feeling occupational stress find it more difficult to empathize with patients and be fully present in their work (Andresen et al., 2016). Additionally, researchers of studies with large sample populations such as Lo

et al. (2018) replicated previous findings that demonstrated a direct connection between job-related stress and turnover intention, which indicates that such feelings are prevalent among nurses in various locations. It is crucial that health care managers develop more effective policies and interventions to help their nurses cope with job-related stress so that the nurses can continue providing high-quality patient care.

### ***Burnout in Nurses***

Psychological burnout that results from extended exposure to a stressful environment is common across the workforce (Khamisa et al., 2016). According to Paul et al. (2018), burnout is a “state of emotional exhaustion where the individual feels overwhelmed by work to the point of feeling fatigued” (p. 2). Professionals such as firefighters, police officers, health care providers, and educators are more likely to experience high levels of psychological stress due to long working hours, increasing job demands, and low levels of community support (Moss et al., 2016). Nurses are particularly prone to experiencing burnout that results from high stress due to several factors, including poor pay (Byung-Kwang et al., 2016), long work hours (Paul et al., 2018), challenging work conditions magnified by a short-staffed workforce (Boamah et al., 2017), and the heavy emotional toll associated with working in the nursing profession (Salvarani et al., 2019). The interconnections between the actors thought to induce burnout in nurses are displayed in Figure 3.

**Figure 3***Development of Burnout Syndrome in Nurses*

*Note.* PTSD = posttraumatic stress disorder. Adapted from “A Critical Care Societies Collaborative Statement: Burnout Syndrome in Critical Care Health-Care Professions. A Call for Action,” by M. Moss, V. Good, D. Gozal, R. Kleinpell, & C. Sessler, 2016, *American Journal of Respiratory and Critical Care Medicine*, 194(1), pp. 106–113 (<https://doi.org/10.1164/rccm.201604-0708ST>).

Half of the nurses surveyed in an ethnographic study by Whittaker et al. (2018) reported that they had called in sick as a result of feeling burned out. Burnout rates among nurses can reach 70% (Lyndon, 2016). Nurses who experience burnout can have trouble engaging with their work, develop feelings of detachment and cynicism toward patients, and feel physically and emotionally fatigued (Paul et al., 2018). As a result, many nurses who feel burned out are unable to fully perform their duties. Before

investigating the factors that can influence nurse burnout in further detail, and what burnout means for nurse turnover rates, a closer look at burnout ensues.

In the earliest known burnout study, psychologist Freudenberger (1974) described “the result of unyielding stress and high standards experienced by people working in hospitals” (as cited in Paul et al., 2018, p. 3). In a work setting, burnout syndrome (BOS) can result from a mismatch between employees’ expectations about their job and the actual requirements of their position (Moss et al., 2016). Nurses with BOS initially feel emotional stress and disenchantment with their job. They then lose their capacity to adapt to changes in their work environment while displaying negative attitudes toward colleagues and patients (Moss et al., 2016). Burnout as a construct measures three dimensions of a person’s personality and ability to work effectively: emotional exhaustion, depersonalization, and inefficacy (Mealer et al., 2016). Emotional exhaustion describes the paralyzing fatigue that results from constantly working under physically and mentally demanding conditions (Paul et al., 2018). Depersonalization refers to detachment and desensitized care of patients, which can lead to a negative impact on the quality and effectiveness of services rendered (Paul et al., 2018).

In a study carried out by Sharma et al. (2014), 80% of the 100 nurses sampled reported that their heavy workloads prevented them from obtaining any rest on the job, while 45% chose the answer “tired of their jobs,” which is a key indicator of burnout. Researchers have also established strong empirical evidence of a link between well-being and burnout. Khamisa et al. (2016) collected data from 277 nurses across four hospitals to examine the relationship between job satisfaction and burnout using the Maslach Burnout

Inventory—Human Services Survey and the Job Satisfaction Survey. The Maslach Burnout Inventory (MBI) records instances of burnout along three key components: emotional exhaustion, depersonalization, and inefficacy (Mealer et al., 2016). Khamisa et al. found that burnout was both a strong predictor of job satisfaction and nurse burnout, and both linked to turnover. Boamah and Laschinger (2016) conducted a quantitative study on the effects of burnout on the intention of newly graduated nurses to leave their jobs and concluded that a statistically significant relationship existed between high levels of burnout and turnover. Factors that directly influenced burnout, and therefore intention to leave, included emotional exhaustion and cynicism, while disruptions in nurses' work-life balance played an indirect role in turnover intention through burnout (Boamah & Laschinger, 2016). The results from Boamah and Laschinger's study supported Mealer et al.'s (2016) definition of burnout and were in general agreement with several studies that linked burnout to emotional exhaustion and general mental well-being: Boamah et al. (2017), Khamisa et al. (2016), and Salvarani et al. (2019).

Yu et al. (2016) discovered that nurses who had been working longer or exhibit passive coping styles were more likely to experience burnout. Yu et al. surveyed 650 oncology nurses working in Chinese hospitals to explore the occurrence of predictors of job quality and satisfaction-compassion fatigue, burnout, and compassion satisfaction. Although all the participants had at least 1 year of oncology nursing experience, Yu et al. found higher instances of burnout and compassion fatigue in nurses who had worked longer. The results indicated that burnout develops gradually, which can help interventions effectively target at-risk employees. Additionally, Yu et al. identified

organizational support, more training, and high levels of cognitive empathy as protective factors against burnout. Personal characteristics and management behavior can affect burnout among nurses, and the conceptual diagram illustrating this argument is in Figure 3.

BOS occurs when individuals' professional demands exceed the resources available to them (Moss et al., 2016). Although burnout is common throughout high-stress professions such as firefighting, teaching, and health care, nurses are particularly prone to developing BOS due to high workloads, frequent staff shortages, inflexible schedules, and the moral challenges they face as part of their job (Byung-Kwang et al., 2016; Paul et al., 2018; Salvarani et al., 2019). BOS can interfere with nurses' ability to provide quality patient care by limiting their ability to engage with patients emotionally and by causing high levels of psychological stress (Moss et al., 2016). Previous research has demonstrated strong evidence of the existence of a link between mental well-being and burnout (Paul et al., 2018; Salvarani et al., 2019; Yu et al., 2016). Several studies conducted on a variety of nurse samples have reached the similar conclusion that burnout can lead to increased nurse turnover (Boamah & Laschinger, 2016; Khamisa et al., 2016). A smaller body of literature provides empirical evidence of strategies that can reduce nurse burnout and turnover. Such strategies include more organizational support, increased training, and interventions designed to increase cognitive empathy (Yu et al., 2016).

## **Management Styles and Nurse Turnover**

Two of the research questions I answered in this study centered on the relationship between job-related stress and burnout in nurse turnover. A review of the literature on factors influencing nurse turnover rates strongly supported the argument that job-related stress and burnout are predictors of nurse turnover. As with all professions, the structure and type of leadership of the health care organization that a nurse works for can also influence nurse retention (Boamah & Laschinger, 2016; Subramony et al., 2018; Yu et al., 2016). Another aim of this study was to determine what effect, if any, management behavior and organizational structure can have on nurse turnover.

Zhang et al. (2018) demonstrated the existence of directly correlated relationships between professional identity, work engagement, and job satisfaction on turnover intention. All these factors relate to the management strategies of an organization. There is a plethora of human resources literature that centers on retention management and a more limited body of literature that focuses on retention management in the nursing industry (Halter et al., 2017). Prior research in the field of human resources more generally has enumerated a few practices that can increase employee retention, including reward systems based on performance, socialization programs, long-term career prospects, and personal recruitment (Ortlieb & Sieben, 2012). Allen et al. (2003) also found that supportive human resources practices such as participatory decision making and growth opportunities led to increased perceived organizational support and job satisfaction, and negatively correlated to turnover.

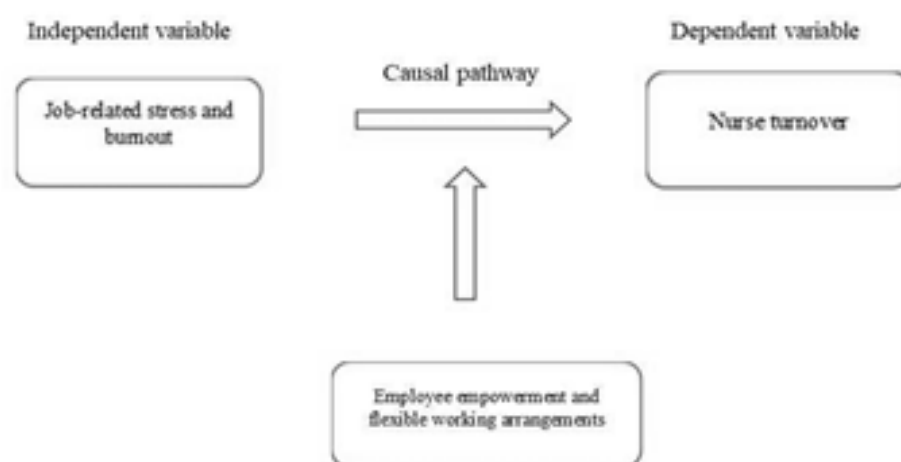
Literature is lacking on two of the management strategies central to this study: flexible working arrangements and employee empowerment. In this study, I sought to determine if these two factors had a moderating effect on the impact of job-related stress and burnout on nurse turnover. Gaps in the literature link a wide range of human resources practices to employee turnover but with a limited focus on the link between employee empowerment strategies and flexible work arrangements with retention rates (Berridge et al., 2018). For example, Brook et al. (2019) conducted a systemic review of the characteristics of interventions that successfully increased retention rates among early-career nurses. The effective strategies identified for retaining nurses included transition to practice programs and internship/residency programs that assisted nurses in adjusting to the demands of their career (Brook et al., 2019). Work-related stress arose from staffing problems and heavy workloads because workers had to do more in the same amount of time. Additionally, lack of resources positively linked with lower job satisfaction, which had a negative impact on job retention (Khamisa et al., 2016). Researchers have established that management policies, including flexible working arrangements and employee empowerment strategies, can impact how nurses view their jobs (Berridge et al., 2018; Brook et al., 2019; Khamisa et al., 2016). I hoped that, through this study, I would help to advance knowledge of the pathways through which these factors can influence nurse turnover by determining if employee empowerment and flexible working arrangements moderate the relationship between turnover and feelings of job-related stress and burnout in nurses.



The relationship between employee empowerment, flexible schedules, and turnover rates remains largely unexplored, despite a general agreement within the human resources literature that these factors can increase turnover (Sergio & Rylova, 2018; Zhang et al., 2018). Several researchers conducted studies specific to the nursing industry and found that nurses would feel better about their jobs if they had more flexible schedules and felt like they had more of an authoritative voice in their organization (Bridgeman et al., 2018; Clendon & Walker, 2016). The moderating effect these variables can have on job-related stress and burnout remains largely untested. I addressed this gap in the literature by looking for evidence of an interconnected pathway between flexible working arrangements and employee empowerment, which are key indicators of nurse turnover, and nurse turnover rates. Figure 4 serves as a visual representation of this pathway.

**Figure 4**

*Proposed Pathway Between Variables in Present Study*



*Note.* Pathway of interrelationships

### ***Flexible Working Environment***

There is a common theme within literature that supportive work environments can decrease nurses' intentions to leave the profession (Boamah & Laschinger, 2016).

Flexible working environments are one type of strategy that managers can employ to increase nurses' job satisfaction and their retention rates (Oates, 2018). There is no single definition of what makes a work environment flexible. Some researchers view flexible working arrangements as enabling workers to combine work and household responsibilities with little to no conflict (Wheatley, 2017), whereas others define any policy that allows people to carry out their work where and when is most convenient as a flexible working arrangement (Atkinson & Sandiford, 2016). Flexible working

arrangements create benefits for both employee and employer (Wheatley, 2017). Boamah and Laschinger (2016), Fuentes (2019), and Oates (2018) claimed that nurses would respond favorably if their managers implemented flexible work policies. Flexible work policies are a potential moderating variable on the relationship between stress, burnout, and nurse turnover.

Employees benefit from having a flexible schedule because they can achieve a better work–life balance, and employers benefit from happier, more productive workers. Research conducted in a diverse range of contexts serves as evidence of the benefits of flexible working arrangements. One study was on the relationship between work–life balance, counterproductive work behavior, and turnover intention on Malaysian employees. In the study, Tan (2019) directly correlated work–life balance with turnover. Similarly, Jnaneswar (2016) determined that a work–life balance created by a flexible work environment has a direct effect on turnover rates in the Indian information technology industry. Investigating the significance of flexible working arrangements for older workers in small firms in the United Kingdom, Atkinson and Sandiford (2016) confirmed that such policies bolstered employee satisfaction. In contrast, within the context of U.S. federal agencies, Caillier (2018) found that flexible working strategies alone did not have a significant impact on turnover, which indicated that flexible working arrangements are not a verified way of reducing turnover. Nevertheless, the similarity of results gleaned from research carried out in diverse settings (Atkinson & Sandiford, 2016; Jnaneswar, 2016; Tan, 2019) demonstrated that flexible work strategies can influence turnover.

Not only are conducive working environments important to employee well-being and retention rates, but there is empirical support for the benefits of flexible working environments on the well-being and work outcomes of nurses (Oates, 2018; Pisanti et al., 2016). Research conducted by Pisanti et al. (2016) highlighted that changing the organizational atmosphere in which a nurse works can act as a buffer against experiencing burnout. Additionally, Oates (2018) found that better work–life balance improved subjective well-being and that flexible working hours facilitated subjective well-being. In a survey study that included 237 mental health nurses working in the United Kingdom, Oates (2018) concluded that positive conceptions of mental well-being associated with clearly defining boundaries between work and home life. Clarifying boundaries helped provide evidence for a linkage between flexible working arrangements and nurse well-being and turnover.

Several researchers have demonstrated that flexible work policies can have a favorable influence on nurses' job satisfaction, which in turn can influence turnover. In a mixed methods study, Clendon and Walker (2016) examined the experiences older nurses had with flexible working arrangements throughout their careers and found that nurses have positive perceptions toward flexible working hours and feel frustrated when denied their schedule requests. Nurses often have notoriously heavy workloads, which can create high levels of mental stress that lead to high turnover rates (Dagget et al., 2016; Lögde et al., 2018). Implementing policies designed to decrease nurse workloads, such as flexible hours, can help create a more favorable working atmosphere.

Investigations into how flexible work policies can affect nurse retention rates are few. Results from a study carried out by Afsar and Rehman (2017) provided further support for the hypothesis that flexible working arrangements can result in higher job satisfaction and retention rates among nurses by highlighting how flexible work schedules can help reduce work–family conflict and increase work embeddedness. To examine the moderating effect of workplace flexibility on the relationship between work–family conflicts and turnover intention, Afsar and Rehman surveyed 187 Pakistani nurses’ perceptions of workplace flexibility and their turnover intention and found that a flexible workplace moderated the link between work–family conflicts and turnover intention by increasing nurses’ job satisfaction and making them more likely to stay.

Researchers have evaluated the effect of different types of flexible working arrangements on nurse turnover. As an illustration, a hospital nursing unit used a self-scheduling model to determine if giving the nurses the ability to set their own schedules would reduce turnover (Fuentes, 2019). An evaluation of turnover rates 30 days postimplementation found that turnover had decreased from 12.96% to 10%, which indicated that giving nurses the freedom to participate in a self-scheduled work environment allowed them to achieve a more favorable work–life balance (Fuentes, 2019). Clendon and Walker (2016) demonstrated that nurses would welcome the chance to select their own shifts and found that other favorable flexible working arrangements included job-sharing schemes, shorter shifts, and fewer night shifts.

The literature surveyed showed that flexible working arrangements benefit workers, including nurses. There is no clear-cut definition of what a flexible working

arrangement is, although some researchers view the arrangements as policies that allow workers to combine work and household responsibilities with minimal conflict (Wheatley, 2017), whereas others view any policy that enables employees to carry out their duties at a convenient time and place as a flexible working arrangement (Atkinson & Sandiford, 2016). A large body of research on the general realm of human resources management points to positive correlations between flexible work policies and turnover rates, with studies conducted in Malaysia (Tan, 2019), India (Jnaneswar, 2016), and the United Kingdom (Atkinson & Sandiford, 2016). A limited amount of research on the effects of flexible working arrangements on employee turnover intention features the nursing profession (Asfar & Rehman, 2017; Clendon & Walker, 2016; Fuentes, 2019). Examples of flexible working arrangements in the context of the nursing industry include shorter shifts, self-scheduling, job sharing, and a cap on the number of night shifts (Clendon & Walker, 2016). Results from studies on flexible working arrangements in the nursing industry indicate that nurses with a more flexible work environment are more likely to be satisfied with their job (Asfar & Rehman, 2017), enjoy higher levels of mental well-being (Clendon & Walker, 2016), and are less likely to leave (Fuentes, 2019).

All of these conclusions align with the fundamental tenets of social exchange theory, the theoretical framework underpinning this study, as they are examples of power appropriately used through an exchange of resources in order to influence the behavior of a subordinate group (Emerson, 1976). In much of the literature reviewed thus far, managers have facilitated an exchange of resources by implementing flexible work

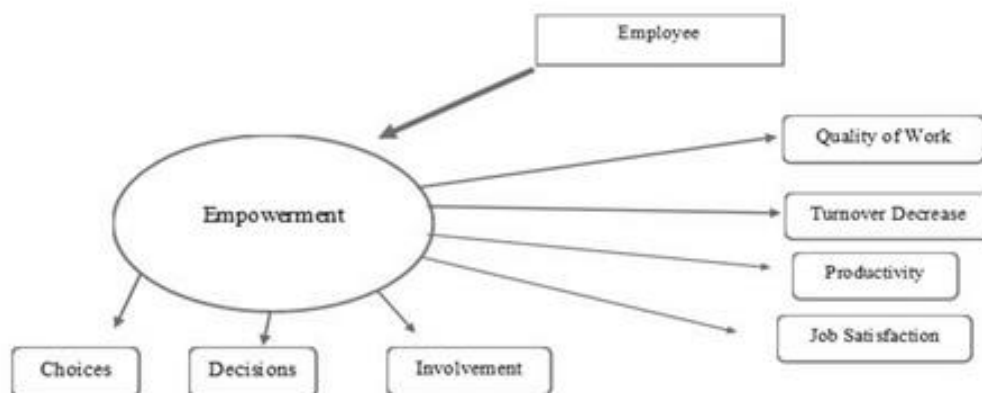
arrangements to help make workers feel more satisfied with their jobs and be less likely to leave. According to social exchange theory, such an exchange would produce an affirmative reaction from the subordinate party (Cropanzano & Mitchell, 2005). For example, employees may respond with less absenteeism as a response to the implementation of flexible working arrangements.

### ***Employee Empowerment***

Employee empowerment is another management strategy for improving retention rates. Employee empowerment involves giving employees the power to make decisions regarding their work and can boost employee motivation and job satisfaction, both of which are central factors to a successful retention program (Sergio & Rylova, 2018). Ukil (2016) defined employee empowerment as shifting more decision-making power to employees at the lower level of an organization's hierarchy. Giving employees more power can increase organizational productivity (Ghosh, 2013) and improve employees' job satisfaction (Ukil, 2016), which makes workers more likely to stay at their job. Figure 5 serves as a visual representation of the different types of employee empowerment and the effects they can have on the workplace and employee.

**Figure 5**

*Visualizing Employee Empowerment*



*Note.* Adapted from “Conceptualizing employee empowerment through flexible working,” by Hussain, N., Ze-hou, S., Ul-Haq, M. A., & Usman, M. 2014, *European Journal of Business and Management*, 6, 187–193.  
<https://www.semanticscholar.org/paper/Conceptualizing-Employee-Empowerment-through-Hussain-Ze-hou/a973e04632ea65533bb77fcf9d4d4dde3ada9544>

Kohli and Sharma (2017) conducted a comprehensive literature review on studies in which researchers examined the relationship between employee empowerment and job satisfaction. In the review they found that increased employee empowerment had a positive relationship with job retention. Sergio and Rylova (2018) investigated the link between employee retention at Volkswagen and different strategies they used to uphold



high retention rates. After performing a qualitative descriptive study, Sergio and Rylova found that employee empowerment, manifested through strategies such as barrier-free access to resources, had a significant link with increased retention. A small but growing body of research, therefore, has provided evidence that employee empowerment strategies can affect workers' desire to stay at their jobs. The next paragraphs include a discussion on employee empowerment within the nursing industry.

There is a small body of literature with a specific focus on employee empowerment in the nursing industry. Khamisa et al. (2016) identified a lack of support as a strong predictor of negative well-being in nurses. Li et al. (2018) concurred regarding support and emphasized the need for employee empowerment. The literature contains extensive evidence regarding the benefits of employee empowerment on work outcomes and nurse well-being (Asiri et al., 2016; Li et al., 2018; Shah et al., 2018). In a study on nurses' perceptions of the leadership style of their managers, Asiri et al. (2016) analyzed survey data from 332 Saudi Arabian nurses and found that the majority of nurses felt that their managers did not exhibit transformational leadership behavior and that this negatively correlated with nurses' commitment to their job. Furthermore, Asiri et al. (2016) identified negative correlations of management leadership and employee empowerment with lower levels of management, which indicated less perceived employee empowerment. Results from Asiri et al.'s study indicated that nurses who feel as if their work is not of value to their organization may feel less motivated and that managers can make nurses feel more important by changing their behaviors.

Other studies have had similar findings. In a study of the connection between job satisfaction and employee empowerment on 247 Malaysian nurses, Shah et al. (2018) discovered a positive relationship between employee empowerment and job satisfaction, which indicated that workers who feel more empowered are happier with their jobs. Employee empowerment positively relates with reduced job turnover because nurses who feel more satisfied with their jobs are less likely to leave (Andresen et al., 2017; Khamisa et al., 2018; Lo et al., 2018). Managers must consider how they can help their employees feel more valuable in the workplace. Researchers have also drawn similar conclusions when conducting analyses on a larger scale. Li et al. (2018) investigated the relationship between job satisfaction and the psychological empowerment of nurses by carrying out a systemic review of over 1,500 articles. According to Li et al., with the exception of two studies, all the studies surveyed supported the hypothesis that psychological empowerment correlates with job satisfaction.

There is a sizable amount of research on the moderating effect that management strategies such as employee empowerment can have on job-related stress and burnout. Kebriaei et al. (2016) found that employee empowerment negatively predicts the turnover intention of nurses. They also concluded that organizational commitment mediated the effect of employee empowerment on turnover intention. Kebriaei et al. viewed employee empowerment as a mediating variable (i.e., something that explains the relationship between the independent and the dependent variables), while the purpose of this present study was to examine whether employee empowerment can act as a moderating variable (i.e., a factor that can affect the strength of the relationship between the variables)

between nurse job-related stress, burnout, and turnover. The results of this present study help fill a gap in the literature by showing how employee empowerment and flexible working arrangements affect the degree to which job-related stress and burnout relate to turnover in the nursing industry.

Implementing employee empowerment policies is another strategy that managers can use to improve retention rates. Employee empowerment can boost retention rates by improving workers' motivation and job satisfaction through giving them more autonomy within the workplace (Sergio & Rylova, 2018). Researchers have concluded that employee empowerment policies can increase organizational productivity (Ghosh, 2013) and improve job satisfaction (Ukil, 2016). Employee empowerment has been positively associated with lowered turnover rates within social science literature. Nursing-specific studies included similar findings. A comprehensive literature review by Kohli and Sharma (2017) found that employee empowerment has a positive relationship with job retention, and Sergio and Rylova (2018) came to a similar conclusion. Likewise, employee empowerment strategies relate with lower turnover rates and higher job satisfaction within the nursing industry (Asiri et al., 2016; Li et al., 2018; Shah et al., 2018). It is important to note the lack of clearly defined strategies that health care managers can use to empower their nurses. A review of literature revealed scant knowledge concerning the moderating effect of employee empowerment on the relationship between job-related stress, burnout, and nurse turnover (Kebriaei et al., 2016). This study contributes to filling a significant gap in the literature.

### **Justification of Research Design**

The final section of the literature review is an overview of this study's proposed research design, which includes citations of previous research studies that have used quantitative non-experimental methodology. Given the aim of this study was to evaluate how two variables, job-related stress or burnout and nurse turnover, relate to one another, I determined that a quantitative research design would be the most appropriate. The positivist approach inherent within a quantitative research design makes possible the scientific examination of a phenomenon through research (McCusker & Gunaydin, 2015). The study findings reveal whether the independent variables predict the dependent variable. The selected method was a nonexperimental regression analysis and moderation analysis. Regression analysis was an appropriate method because it helps researchers determine whether an independent variable has predictive power over a dependent variable (Schroeder et al., 2016).

Researchers involved in multiple studies have used regression analysis to determine the impact of various variables on nurse turnover. Yang et al. (2017) conducted a questionnaire-based survey study on 800 nurses to investigate the relationship between work pressure and factors associated with nurse turnover. Yang et al. conducted a multifactor logistic regression and found that 19% of the sampled nurses reported a strong turnover intention influenced by increasing amounts of pressure at work. Al Sabei et al. (2019) performed a regression analysis study to determine predictors of turnover intention and burnout among nurses working in Omani hospitals. Al Sabei et al. performed a logistic regression analysis on their survey data and

concluded that a favorable work environment positively linked to less turnover intention, but only when job satisfaction was high. The researchers found that job satisfaction had a moderating role on the relationship between work environment and turnover intention. By using a logistic regression analysis, Al Sabei et al. produced results that supported the bulk of the existing literature.

Moderation analyses, traditionally used to examine how two independent variables (one predictor and moderator) affect the values of a dependent variable (Agarwal & Gupta, 2018), helped evaluate the relationship between turnover intention and work engagement. In a study testing a moderation-mediation model for the relationships between work engagement, conscientiousness, motivating job characteristics, and managers' turnover intentions, Agarwal and Gupta (2018) found evidence that work engagement can mediate the relationship between turnover intention and motivating job characteristics, while conscientiousness moderated the relationship between work engagement and turnover. Although the study concerned private sector managers in India, it is significant because Agarwal and Gupta demonstrated how other variables can moderate turnover intention. Within a nursing specific context, Al Sabei et al. (2019) found evidence that job satisfaction can have a moderating role over the relationship between work environment and turnover intention.

### **Summary and Conclusions**

Nurse turnover has significant implications for patient care and health care organizations. Nurse turnover requires that health care organizations invest more time and money in advertising, recruiting, and training new hires and can lower the

productivity and morale of other staff members (Mosadeghrad, 2013). Consequently, hospitals divert time and funds from patient care quality. Statistics have shown that up to 70% of nurses experience burnout that leads to turnover (Lyndon, 2016). This percentage is important because an aging American population means that nurses are in high demand but in short supply (Paul et al., 2018). Additional factors such as an aging workforce, an insufficient number of graduates going into the nursing field, and an increase in workplace violence within the health care industry highlight the importance of having a well-staffed nursing workforce (Hadaad & Toney-Butler, 2019; Paul et al., 2018).

Feelings of job-related stress and burnout feature as the most common factors that result in nurses leaving their jobs (Dagget et al., 2016; Mosadeghrad, 2013; Sarafis et al., 2016; Paul et al., 2018; Whittaker et al., 2018). Job-related stress can have a significant impact on nurses' mental health and their ability to carry out their duties effectively (Andresen et al., 2017; Sarafis et al., 2016). Sarafis et al. (2016) identified a negative association between work stress and the caring behavior of nurses that limits their ability to be fully present in their work. Nurses act as an important intermediary between patients and physicians and have a high level of patient contact. It is crucial for patient safety that nurses be fully present and engaged in their work.

Nurses are also prone to experiencing BOS, in which they can feel emotional stress and disenchantment with their job, and they can lose their capacity to adapt to changes in their work environment while displaying negative attitudes toward colleagues and patients (Moss et al., 2016). Factors such as poor pay (Byung-Kwang et al., 2016), long work hours (Paul et al., 2018), challenging work conditions resulting from a short-

staffed workforce (Boamah et al., 2017), and the emotional toll associated with working in the nursing profession (Salvarani et al., 2019) can all contribute to developing BOS. Several researchers have established a reciprocal relationship between burnout, which is often taken as a sign of declining mental health, and turnover (Guo et al., 2019; Lo et al., 2018; Whittaker et al., 2018). Strategies that managers can employ to increase nurse retention as it relates to burnout include providing more organizational support, increasing the duration of training, and designing interventions to increase cognitive empathy (Yu et al., 2016).

Despite a general agreement within the human resources literature that employee empowerment and flexible working arrangements can influence turnover rates, these linkages remain largely unexplored (Sergio & Rylova, 2018; Zhang et al., 2018). Atkinson and Sandiford (2016), Jnaneswar (2016), and Tan (2019) all concluded that flexible working arrangements could help nurses achieve a more favorable work–life balance, which has a positive impact on turnover rates. Providing employees more autonomy within the workplace can empower them to feel more motivated, valued, and committed to their work (Ghosh, 2013; Sergio & Rylova, 2018). There is a small body of literature specific to the nursing industry that provided empirical evidence of the positive role that employee empowerment strategies can have on turnover intention. Asiri et al. (2016), Li et al. (2018), and Shah et al. (2018) all found that empowered nurses who feel more satisfied with their jobs have more favorable perceptions of their managers.

There was a gap in the literature regarding the moderating effect that management strategies such as employee empowerment can have on job-related stress and burnout.

Empowerment can exist in many forms, including structural, psychological, and cognitive. Although Kebriaei et al. (2016) found that employee empowerment negatively predicts the turnover intention of nurses, they identified employee empowerment as a mediating variable, not a moderating variable, on turnover. One of the primary purposes of this study was to determine if employee empowerment and flexible working arrangements are moderating variables on the relationship between job-related stress, burnout, and turnover in nurses. In doing so, the results from this study make a significant contribution to a growing body of research that may help to improve nurses' workplaces and help their managers better understand their needs.



## Chapter 3: Research Method

### **Data Collection and Analysis Procedures**

The purpose of this quantitative nonexperimental survey study was to test the social exchange theory (Emerson, 1976) that relates to reciprocity of human actions and behaviors. The study involved applying the theory in evaluating the effect of job-related stress and burnout (independent variables) on turnover intention (dependent variable) of hospital nurses in Dallas, Texas. Job-related stress is the psychological condition of feeling emotionally and physically exhausted from work. Burnout refers to the persistent feeling of detachment and indifference toward one's work. Turnover intention refers to thoughts of seeking to separate or leave the employment relationship. The study also involved testing the effect of two additional variables on the relationship between job-related stress and burnout. These were flexible working arrangements and employee empowerment. Flexible working arrangement refers to the formal arrangements between employer and employee relating to working hours and job completion. Employee empowerment is the set of actions taken by an employer to enable employees to perform their jobs better.

The previous chapter included the background of the study and the theoretical underpinnings thereof. It also laid out, to some extent, the methodological precedent for the research methods of the study, including the prior use of the study variables and the methods by which prior studies have addressed similar issues. Chapter 3 contains an in-depth discussion of the methodological aspects of the study.

Chapter 3 begins with a discussion of the research design and rationale. This section addresses the nature of the quantitative methodology and nonexperimental research design, the reasons these two approaches were appropriate for this study, and a discussion of key aspects of the methodology. The key aspects consist of the population, its sample size, and recruitment of study participants. Following this is an explanation of the instrumentation used to measure the study variables. These explanations help with the operationalization of the variables. The methodology section concludes with a section on the data analysis plan. After methodology, the chapter includes a discussion of threats to validity and ethical considerations. Chapter 3 concludes with a summary.

### **Research Design and Rationale**

For this study, I used a quantitative approach and conducted a statistical examination of relationships between two or more variables. Quantitative studies founded on the positivist approach assume that constructs are observable and measurable, making the scientific examination of a phenomenon through research possible (McCusker & Gunaydin, 2015). In practice, therefore, quantitative research does not address broad phenomena but specific variables and the relationships between those variables (Bell et al., 2018). As the name suggests, a quantitative approach is appropriate to variables that are either inherently numerical or easily quantifiable (Bell et al., 2018). Quantitative research relies on using inferential statistics to make conclusions about the relationship of variables (McCusker & Gunaydin, 2015). Quantitative data are numerical, short-form, and closed-ended, and it is feasible to collect and process the large sample sizes necessitated by statistical analyses (Bell et al., 2018). Quantitative research is also

appropriate for this present study as evidenced by existing literature. Conversely, quantitative inquiry is unsuitable for exploring the personal experiences of study subjects (Bell et al., 2018).

The quantitative approach was appropriate to this study for several reasons. The study was inherently relational. The purpose of the study and the research questions focused on analyzing the relationships between variables. Although the variables under observation were not inherently quantitative, they were bounded by theory. This made the study quantifiable using existing instrumentation. Given this quantifiable quality, I could quantitatively evaluate without further exploration. As laid out in the literature review, there was also reason to hypothesize the relationships. Furthermore, given that the intention of the study was to create empirically strong results with implications for social change, the statistical power afforded by a quantitative approach was valuable.

The alternative to qualitative research is a qualitative approach. Qualitative research involves exploring or describing the key phenomena under study (Merriam & Tisdell, 2015). Whereas the focus in quantitative research is on narrow variables, qualitative researchers adopt a broader approach to the whole of the underlying phenomenon (Merriam & Tisdell, 2015). Qualitative researchers also adopt a more subjective lens, seeking to understand the experiences and perceptions of the participants (Merriam & Tisdell, 2015). Because of its exploratory nature, a qualitative approach is a good fit when there is a relatively weak theoretical basis for a given study (Merriam & Tisdell, 2015). None of these characteristics matched this study. Although burnout and job-related stress are subjective experiences, the experience of such was not the focus of

this study. Rather, the focus was on the empirical effect of those experiences on other variables. The exploratory aspect of a qualitative approach was also unnecessary because of the nature of the established variables in the study; only the potential relationships between them were novel. Therefore, a qualitative approach would have been a poor fit for this study, and a quantitative methodology was preferable.

Broadly speaking, quantitative research consists of two categories: experimental research and nonexperimental research (Flannelly et al., 2018). In a functional sense, this distinction is strange in that only a small fraction of quantitative studies is experimental. The value of an experimental approach is significant enough to make it the idealized form of quantitative inquiry. In an experiment, the researcher has the ability to randomize participants into two groups, a control group and a study group (or set of study groups), to test the effect of independent variables on these two different groups (Flannelly et al., 2018). Because of the randomization of participants, the two groups should have no significant differences at the start of the experience, and thus a researcher can ascertain if the independent variable causes a change in the dependent variable (Flannelly et al., 2018). Mimicking the rest of the setup minus randomization results in a quasi-experimental design. Although they create especially strong, causal conclusions, both experimental and quasi-experimental designs require that a researcher control the application of the independent variables (Flannelly et al., 2018). This requirement made both experimental and quasi-experimental approaches nonviable in this study. Despite the feasibility for me to control the level of job stress, burnout, or flexible work arrangements

participants experienced, doing so would have been ethically inappropriate given the serious detrimental effects of job stress and burnout.

Accordingly, a nonexperimental approach was the appropriate choice.

Nonexperimental research lacks the ability to determine if the relationships uncovered are causal with certainty (Johnson, 2001). Because of this, researchers conducting nonexperimental research can also draw from a significantly larger pool of real-world data free from stringent and potentially unethical experimental conditions (Johnson, 2001). The relationships reflected in nonexperimental results are not as strong, but they still reflect real-world relationships between the key variables (Johnson, 2001).

Nonexperimental designs, therefore, constitute a broad majority of quantitative research, especially research pertaining to variables such as those under study in this research.

Moreover, it is difficult to control for these variables, much less manipulate or randomize them.

Within the family of nonexperimental research are various types of research, such as descriptive, causal comparative, or correlational. Researchers conducting descriptive research draw no inferential conclusions, but only describe the situation (Johnson, 2001). Such an approach did not suit this study, as I sought to draw conclusions. Researchers conducting causal comparative research seek to compare the different outcomes stemming from different circumstances without experimental manipulation (Johnson, 2001). In this study, I seek not to compare discrete situations but to examine broader relationships. Hence, a correlational approach was appropriate. Researchers perform correlational research to understand the relationships between variables (Johnson, 2001).

The specific research design was regression analysis, which is a type of correlational research. Regression analysis involves examining how an independent variable predicts the variations in a dependent variable (Schroeder et al., 2016). Regression was appropriate for this study because the study involved examining whether the independent variables job-related stress and burnout predict the turnover intention of nurses. Moderation, on the other hand, involves examining how the interaction of two independent variables (one predictor and one moderator) affects the values of a dependent variable (Baron & Kenny, 1986).

### **Methodology**

This section addresses the various aspects of conducting the study. First is a discussion of the study population, followed by a discussion of the sampling procedure for that population. The third subsection addresses recruitment, participation, and data collection. The fourth part includes a discussion of aspects of instrumentation. The section concludes with the data analysis plan.

### **Population**

The broad population for this study included nurses who were practicing in hospitals. This population included a diverse set of participants ranging from newly graduated nurses who had at least 1 year of professional experience to seasoned veterans who had multiple decades in their professional background. Within the broad population, the specific target population was nurses working at Dallas hospitals in the state of Texas. The geographic delimitation to Dallas served to account for potential regional differences in variables and to allow for better access to the population. The inclusion criteria of

participants who had at least 1 year of experience as nurses was to ensure the participants had sufficient work experience for their responses to hold weight. The employment status of retired nurses and unemployed nurses violated the concept of turnover intention and rendered their participation meaningless. The inclusion criteria of being a nurse employed at a hospital served to narrow the study's focus to a specific work context. Nurses working in nursing homes or other parts of the caregiving practice likely experience a different set of job-related stressors. For example, job stress would likely be especially high in hospice nurses, but in a manner less applicable to hospital nurses.

### **Sampling and Sampling Procedures**

The sample for this study included 122 nurses who were practicing in hospitals in Dallas, Texas. I selected participants using stratified random sampling of hospitals in Dallas, Texas. In this study, the focus of the different strata was demographics related to gender and years of professional experience. G\*Power analysis was helpful in recommending a sample size of 120 participants (Faul et al., 2009). A G\*Power analysis using a significance level of .05, a statistical power of 80%, and a medium effect size, along with the set of analyses described in the Data Analysis section that follows, yielded a minimum necessary sample size of 109 participants (see Appendix F). Some participants who start a survey may not complete it. I chose a minimum sample size of 120 participants, which included an extra 10% above the minimum size to account for this attrition. Request letters were sent through the Texas Nurses Association, which is a statewide professional association. I also sourced participants from within the SurveyMonkey community.

### **Procedures for Recruitment, Participation, and Data Collection**

I sought approval from the Walden University Institutional Review Board (IRB) prior to collecting any data. Typically, a researcher would obtain site authorization prior to IRB approval. However, as the study included several sites based on the rolling tally of participants, obtaining site authorization in advance of data collection was unfeasible. Data collection commenced after I made necessary changes to the study and received approval from the IRB. The IRB approval number for the study is 10-30-20-0254565. I used a state-level nurse association's demographic data regarding the nursing workforce. Where available, these data helped divide the population into strata based on tenure. I also apportioned sample sizes into stratum-specific minimum sample sizes based on the state-level stratum representation. The final step consisted of composing a list of all hospitals in the state of Texas for which public contact information was available.

I drafted a site permission letter requesting partnership for all target hospitals and the Texas Nurses Association. This email detailed the nature and purpose of the study and outlined the potential benefits of the study to hospitals. It included a request for permission to collect data from the hospital. Hospitals willing to allow data collection scanned and emailed a signed site authorization letter to me, permitting the collection of data from their employees. I sent an approved recruiting flyer to nurse employees through the participating hospitals. This email included a description of the study, the requirements for participation, and a link to the anonymous survey questionnaire through which they could participate.



The survey instruments contained compilations of a series of survey questionnaires administered online. I measured the independent variable job-related stress using the Job-Related Stress Scale (Parker & DeCotiis, 1983), I measured the independent variable burnout using the MBI (Bakker et al., 2002), and I measured the dependent variable turnover intention using the Turnover Intention Scale (TIS-6; Bothma & Roodt, 2013). I used the Flexible I-Deals Scale by Rousseau (2009) to measure flexible working arrangements, and I measured the moderating variable employee empowerment using the Menon Employee Empowerment Scale (Menon, 2001).

The online platform SurveyMonkey hosted the survey instruments. The recruitment email included a link to a SurveyMonkey page containing the survey. The cover page of the survey constituted the informed consent. By proceeding from the informed consent to take the survey, participants indicated agreement with the terms of informed consent. Although there was no maximum completion time, I estimated the full survey would take 15 minutes to complete. Participants understood that, at any point prior to submission, they could close the survey website and withdraw their participation. The final data set contained some partially completed surveys. All data collected for the study were anonymous. Recruitment stopped once participant surveys received reached 165. The survey ran for 30 days. The survey remained open for an additional week beyond the initial 30 days to provide prospective participants a chance to participate. I downloaded the data from the surveys into a Microsoft Excel spreadsheet and reviewed them before uploading them into the SPSS software (Version 21) for analysis. I will keep

the data downloaded from the server in a password-protected folder and will retain the data for 3 years following publication of the dissertation.

### **Instrumentation Operationalization of Constructs**

The data collection instrument for the study was an online questionnaire hosted on SurveyMonkey. I received written permission from the authors of the instruments prior to the commencement of the study. Permission letters are available in Appendices M, N, O, P, and Q. The survey began with demographic questions that assessed age, gender, and years of experience. I used the following survey instruments. Letters seeking permission to use instruments in this study were sent to the authors of these instruments.

#### ***Job-related Stress Scale***

The Job-related Stress Scale is an 11-item, 5-point Likert-type scale. Scale answer choices include *strongly disagree*, *disagree*, *neutral*, *agree*, and *strongly agree*. The scale was developed by Parker and DeCotiis (1983). The average Cronbach alpha is .89. In a study by Hoboubi et al. (2017), the Cronbach alpha was .83. Parker and DeCotiis (1983) had a reliability score of .98, which demonstrated good internal reliability. An example question from this scale is “Working here leaves little time for other activities.” The permissions granted through emailed letters are in Appendices M–Q.

#### ***Maslach Burnout Inventory***

The MBI is a 16-question, 7-point Likert-type scale designed to measure burnout in service profession workers (Bakker et al., 2002). The scale has three subscales of exhaustion, cynicism, and professional efficacy. A sample question reads, “I feel emotionally drained from work.” Research has shown good internal consistency, with

Cronbach's alphas ranging from .84 to .90 for exhaustion, from .74 to .84 for cynicism, and from .70 to .78 for professional efficacy.

### ***Turnover Intention Scale***

The Turnover Intention Scale is a scale that measures turnover intention and consists of six items on a 7-point Likert scale (Bothma & Roodt, 2013). A sample question reads, "How likely are you to accept another job at the same compensation level should it be offered to you?" The scale includes a single subscale that has good reliability, with a Cronbach's alpha of .80. Furthermore, validation of the scale indicated a good correlation with leaving or staying.

### ***Flexible I-Deals Scale.***

Measuring flexibility of work was accomplished by using the three-item Flexible I-Deals Scale (Rousseau et al., 2009) short instrument. The instrument includes a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). A sample question reads, "Outside of formal leave and sick time, my supervisor has allowed me to take time off to attend to non-work-related issues." The Cronbach's alpha of the Flexible I-Deals Scale is between .80 and .81 for flexibility.

### ***Menon Empowerment Scale***

The Menon employee empowerment scale is a nine-item, 6-point Likert scale (Menon, 2001). The Menon employee empowerment scale contains three subscales of perceived control, perceived competence, and goal internalization. A sample question reads, "I am inspired by what we are trying to achieve as an organization." The reliability of these subscales is good, with Cronbach's alphas of .83, .86, and .88, respectively.

## **Operationalization of Constructs**

The operationalization of the variables was as follows.

### ***Job-Related Stress***

I operationalized job-related stress using the Job-related scale (Parker & DeCotiis, 1983), which structured the variable as having six dimensions: organization of work and financial issues, public criticism, hazards at the workplace, interpersonal conflicts at the workplace, shift work, and professional and intellectual demands. Each dimension remained a distinct predictor within the overall variable. I treated the instrument as a continuous variable as per analytical tradition.

### ***Burnout***

I operationalized burnout using the Maslach Burnout Index (Bakker et al., 2002). The variable consists of three subscales: exhaustion, cynicism, and professional efficacy. Each dimension remained a separate predictor within the overall variable. I considered the variable a continuous variable that was measurable using Likert-type scale data for all dimensions.

### ***Turnover Intention***

I operationalized turnover intention using the Turnover Intention Scale (Bothma & Roodt, 2013). Turnover intention was a one-dimensional variable. The variable was measurable using Likert-type scale data and treated as a continuous variable as per analytical tradition.

### ***Flexibility of Work***

I operationalized flexibility of work using the Flexible I-Deals Scale, a three-item instrument (Rousseau et al., 2009). In essence, as the variable was measured using 5-point Likert-type scale data for all dimensions, it was treated as a continuous variable as per analytical tradition.

### ***Employee Empowerment***

I operationalized employee empowerment using the Menon Employee Empowerment Scale (Menon, 2001). Hence, employee empowerment was a variable with three subscales of perceived control, perceived competence, and goal internalization. Because the variable used Likert-type scale data for all dimensions, I treated it as a continuous variable as per analytical tradition.

### **Data Analysis Plan**

The data analysis for this study consisted of descriptive statistics, multiple linear regression, and one-way analysis of variance tests. I used SPSS statistical analysis software to carry out all data analysis. As is normal practice, data cleaning of incomplete data preceded all data analysis. There were no outliers expected because the data included descriptive demographics and Likert-type data. The first stage of the analysis, the descriptive analysis, involved describing the sample: the demographic variables used to define the strata for describing the sample were gender, age, and years of work experience. Other analyses included using statistical values such as means, medians, and ranges to help descriptively present all the variables. Descriptive statistics and the

inferential analyses helped to answer the research questions. The study consisted of six research questions and associated hypotheses as follows:

RQ1: What is the predictive relationship, if any, of job-related stress on the turnover intention of nurses?

$H_01$ : The level of job-related stress is not a statistically significant predictor of the turnover intention of nurses.

$H_a1$ : The level of job-related stress is a statistically significant predictor of the turnover intention of nurses.

RQ2: What is the predictive relationship, if any, of burnout on the turnover intention of nurses?

$H_02$ : The level of burnout is not a statistically significant predictor of the turnover intention of nurses.

$H_a2$ : The level of burnout is a statistically significant predictor of the turnover intention of nurses.

RQ3: What is the interaction effect, if any, of job-related stress and flexible working environment on the turnover intention of nurses?

$H_03$ : Flexible working environment does not moderate the relationship between job-related stress and the turnover intention of nurses.

$H_a3$ : Flexible working environment moderates the relationship between job-related stress and the turnover intention of nurses.

RQ4: What is the interaction effect, if any, of job-related stress and employee empowerment on the turnover intention of nurses?

*H<sub>04</sub>*: Employee empowerment does not moderate the relationship between job-related stress and the turnover intention of nurses.

*H<sub>a4</sub>*: Employee empowerment moderates the relationship between job-related stress and the turnover intention of nurses.

RQ5: What is the interaction effect, if any, of burnout and flexible working arrangement on the turnover intention of nurses?

*H<sub>05</sub>*: Flexible working arrangement does not moderate the relationship between burnout and the turnover intention of nurses.

*H<sub>a5</sub>*: Flexible working arrangement moderates the relationship between burnout and the turnover intention of nurses.

RQ6: What is the interaction effect, if any, of burnout and employee empowerment on the turnover intention of nurses?

*H<sub>06</sub>*: Employee empowerment does not moderate the relationship between burnout and the turnover intention of nurses.

*H<sub>a6</sub>*: Employee empowerment moderates the relationship between burnout and the turnover intention of nurses.

For the first and second research questions, individual simple linear regression analyses (Grégoire, 2014) were suitable for determining if the independent variables job-related stress or burnout predicted the turnover intention of nurses. These regression models took the form  $Y = a + bX$ , where  $Y$  was turnover intention and  $X$  was either job-related stress or burnout. First, testing the assumptions of the regression models involved evaluating the normality of the dependent variables and homoscedasticity (Grégoire,

2014). The assumption of normality held, as is evident from the plots, scattergram, the kurtosis, and skewness. This statistical analysis led to data that demonstrated if job-related stress or burnout predicted the turnover intention of nurses. I proposed a  $p$  value of .05 to serve as the statistical basis for accepting or rejecting the null hypotheses. To reject the null hypotheses, the overall  $F$  test for the model, along with the coefficient of regression for job stress and burnout, needed to be significantly different from zero.

Answering the third through sixth questions involved using multiple linear regression analysis to help determine if there was an interaction effect between flexible working arrangements and the independent variables of the study (job-related stress or burnout) in the prediction of the turnover intention of nurses and if there was an interaction effect between employee empowerment and the independent variables of the study (job-related stress and burnout) in the prediction of the turnover intention of nurses. The multiple linear regression analysis included assumptions of the normality of the dependent variables and testing for homoscedasticity (Grégoire, 2014). Assumptions of normality held true. The multiple linear regression took the form  $Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_1X_3 + b_6X_2X_3 + b_7X_1X_4 + b_8X_2X_4$ . In this model,  $X_1$  was job-related stress,  $X_2$  was burnout,  $X_3$  was flexible working conditions, and  $X_4$  was employee empowerment. The null hypothesis would be rejected if there was a statistically significant interaction between the independent variable and the moderator (Fritz & Arthur, 2017). For the third through sixth research questions, the overall  $F$  test for the multiple regression, as well as the corresponding coefficient of correlation for the interaction term ( $\beta_5$  through  $\beta_8$ , respectively), needed to be significant.



## **Validity**

Validity is a key part of all research. Validity comprises external, internal, and construct validity (Bell et al., 2018).

### **External Validity**

External validity refers to the extent to which the study findings represent a good, generalizable understanding of the world (Bell et al., 2018). Generalization is a strength of quantitative research. Threats to external validity generally take the form of reasons why the study findings might represent only a limited subset of the population or otherwise be skewed or biased toward certain outcomes.

Sample representativeness and strong analysis of sufficient statistical power help to preserve good external validity, which also helps ensure the generalizability of the results. Delimiting the population to Texas and nurses in hospitals held implications for the generalizability of the findings. The reporting of the results emphasized the scope, given that the results cannot necessarily be generalized outside these contexts. A limitation was that, even within the sample population, the study may have masked hospital-level effects by focusing on the employee level.

Another threat to external validity was the use of self-reported data and voluntary participation. Although self-reported data are necessary to address issues of practicality and research ethics, using only voluntary participants means that a sample might in some way contain self-selection bias. There is no telling if those who chose not to participate in the study held different views that could have significantly contributed to the nature of the findings. As this bias could not be avoided, sufficient allowances to minimize it

consisted of making study participation easy and by ensuring the reporting of results addressed this limitation. I expected strong external validity numbers.

### **Internal Validity**

Internal validity refers to the cohesion of a study and the extent to which it answers the questions a researcher set out to answer (Bell et al., 2018). Threats to internal validity are factors that might be expected to impact the alignment between study components. I expected this study to encounter good validity scores. The best way to ensure internal validity is to create a strong alignment chain between the different components of a study. This alignment began in Chapter 1. The purpose of the study was derived from the research problem, and the research purpose in turn shaped the research questions. I operationalized all the variables using existing, validated instrumentation or intrinsic values. Fully operationalizing helped to ensure all the data collected measured variables that were meaningful in terms of answering the research questions and addressing the research problem.

One threat to internal validity pertained to the fact that turnover intention does not necessarily predict actual turnover. Measuring actual turnover would require follow-ups and access to proprietary human resources data. Measuring actual turnover was not feasible. From a field-study viewpoint, measuring actual turnover has historically been problematic, and consequently the use of the turnover intention measure abounds in the methodology literature.

## **Construct Validity**

Construct validity refers to the validity of specific constructs within a study (Bell et al., 2018). The quality of construct validity was the basis for selecting from existing, validated instrumentation. The measure of job-related stress, the Jobb-related Scale (Parker & DeCotiis, 1983), is an existing, validated instrument with good psychometric properties for measuring the underlying construct, as tested through cross-validation with other measures. I operationalized burnout in terms of the Maslach Burnout Index (Bakker et al., 2002), which is a well-established and validated measure of the burnout construct with good psychometric properties. Flexible work arrangements consisted of a validated and straightforward measure via Rousseau and Kim's (2006) Flexible I-Deals Scale. Perhaps the strongest operationalization of a construct is that it can assign values to a variable based on a theoretical foundation. I operationalized turnover intention using the Turnover Intentin Scale (Bothma & Roodt, 2013), which is a widely used and especially well-validated measure of turnover intention that is also correlated with actual turnover. Finally, I operationalized employee empowerment using the Menon Employee Empowerment Scale (Menon, 2001). In addition to good reliability, the Cronbach's alphas for these instruments were all good.

## **Ethical Procedures**

Conduct of the study adhered to the *Belmont Report* principles of justice, beneficence, and fairness. Before collecting any data, I submitted the required documents to the university's IRB. The recruitment process commenced after securing formal authorization to solicit research participants at the participating hospitals. Participation

was voluntary, with no individuals coerced to be part of the study. The informed consent form part of the survey given to each participant contained sufficient disclosures about the nature of the study. As per the study design, the online platform SurveyMonkey hosted the survey questions. No signatures were necessary on the informed consent form because it was electronically accessible. Clicking the “yes” button in the informed consent section indicated consent to participate in the study. The data were quantitative and hence collected anonymously. Thus, I remained unaware of the participants’ actual identities. The data storage policy is to store data for three years following the publication of the study, before destroying the data. Study participants may request a copy of the research report by sending me an email. I will delete electronic data and manually shred paper-based files such as analysis sheets after the three-year period. The study did not address sensitive data, and I did not expect to include vulnerable populations. Accordingly, the study posed minimal risk to participants. The study may have direct benefits to both the participating hospitals and the specific participants, given the intention of the study to uncover factors that may reduce the harm resulting from job-related stress and burnout.

### **Summary**

I designed this study as a nonexperimental regression study. The independent variables were job-related stress and burnout. The dependent variable was turnover intention. The two moderating variables were flexible work arrangements and employee empowerment. Chapters 2 and 3 featured an extensive review of the relational nature of the variables and the consequent choice to use a quantitative methodology. A qualitative

approach was less suited for this study because of the relational nature of the proposed variables. A qualitative study of the variables would have been poorly suited to studying the relationships between key variables and might have also caused prospective participants' additional emotional stress. The population was from hospitals in the Dallas, Texas, area. The study participants were nurse employees with at least 1 year of work experience. A sample size of 120, determined using the G\*Power tool, included accounting for possible attrition of participants. Using existing instruments with known Cronbach alphas helped with operationalizing the variables. I received written permission to use the instruments from their respective authors, and I uploaded the study instruments into SurveyMonkey. I downloaded the survey results into the SPSS statistical software and analyzed them. Chapter 4 includes details of the data collection and results.

## Chapter 4: Results

The purpose of this quantitative nonexperimental survey study was to test the social exchange theory (Emerson, 1976) that relates to reciprocity of human actions and behaviors. The study involved applying the theory to evaluate the effect of job-related stress and burnout (independent variables) on turnover intention (dependent variable) of hospital nurses in Dallas, Texas. Job-related stress refers to the psychological condition of feeling emotionally and physically exhausted from work. Burnout is the feeling of detachment and indifference towards one's work. Turnover intention refers to thoughts of seeking to separate or leave the employment relationship. The study also involved testing the effect of two additional variables on the relationship between job-related stress and burnout was tested. These were flexible working arrangements and employee empowerment (moderating variables). Flexible working arrangements are the formal arrangements between employer and employee concerning working hours and job completion. Employee empowerment is the set of actions taken by an employer to enable employees to perform their jobs better.

RQ1: What is the predictive relationship, if any, of job-related stress on the turnover intention of nurses?

$H_01$ : The level of job-related stress is not a statistically significant predictor of the turnover intention of nurses.

$H_{a1}$ : The level of job-related stress is a statistically significant predictor of the turnover intention of nurses.

RQ2: What is the predictive relationship, if any, of burnout on the turnover intention of nurses?

*H<sub>0</sub>2*: The level of burnout is not a statistically significant predictor of the turnover intention of nurses.

*H<sub>a</sub>2*: The level of burnout is a statistically significant predictor of the turnover intention of nurses.

RQ3: What is the interaction effect, if any, of job-related stress and flexible working environment on the turnover intention of nurses?

*H<sub>0</sub>3*: Flexible working environment does not moderate the relationship between job-related stress and the turnover intention of nurses.

*H<sub>a</sub>3*: Flexible working environment moderates the relationship between job-related stress and the turnover intention of nurses.

RQ4: What is the interaction effect, if any, of job-related stress and employee empowerment on the turnover intention of nurses?

*H<sub>0</sub>4*: Employee empowerment does not moderate the relationship between job-related stress and the turnover intention of nurses.

*H<sub>a</sub>4*: Employee empowerment moderates the relationship between job-related stress and the turnover intention of nurses.

RQ5: What is the interaction effect, if any, of burnout and flexible working arrangement on the turnover intention of nurses?

*H<sub>0</sub>5*: Flexible working arrangement does not moderate the relationship between burnout and the turnover intention of nurses.

*H<sub>a5</sub>*: Flexible working arrangement moderates the relationship between burnout and the turnover intention of nurses.

RQ6: What is the interaction effect, if any, of burnout and employee empowerment on the turnover intention of nurses?

*H<sub>06</sub>*: Employee empowerment does not moderate the relationship between burnout and the turnover intention of nurses.

*H<sub>a6</sub>*: Employee empowerment moderates the relationship between burnout and the turnover intention of nurses.

This chapter contains the results of the data collected and the various statistical methods used to analyze those data. The first part includes a description of the research setting. In the Research Setting section, I discuss the methods I used to collect data, and I briefly evaluate each method and the outcomes compared to my expectations. In the Demographics section, I discuss the characteristics of the hospital and hospital nurse distribution in Dallas, as well as the population characteristics of Dallas, including any peculiarities of the target population. The Demographics section also includes discussion of the sample and of the importance of selecting more than one method of data collection. Of special note is the discussion of the early challenges experienced while attempting a certain participant recruitment method during the COVID-19 pandemic. Most hospital IRBs were not prioritizing partnering with external researchers at that time. I also discuss the other options of data collection and the surprising cooperation I obtained through one recruitment approach. I then discuss the importance of gender balance and the gender distribution of the participants. Another demographic was years of experience, and for



this demographic I designed the study survey to exclude participants who did not meet the criterion. I discuss the age group distribution of the participant population and how it compares with expectations of the study design. Although number of hours worked per week was a demographic question, I removed it from the survey for reasons I discuss in the Demographics section. I also discuss the rationale I developed for its removal to meet a survey requirement set by the SurveyMonkey platform.

In the data analysis section, I explain the process of downloading data into Excel and examining, cleaning, and preparing the data for uploading into SPSS. I discuss various aspects of the quality of the downloaded data regarding any discrepancies found with the data. I also discuss the goal regarding the number of participants versus actual participants, and I review evidence of the reliability of the study data before presenting the results of the study. Chapter 4 concludes with a chapter summary.

### **Research Setting**

I designed this study before COVID-19, and I did not anticipate the strain on health care facilities and nurses. As a result of the pandemic and the strain, hospital administrators, especially IRBs, did not welcome applications for independent research partnerships. There was a shortage of adequate staffing of the hospitals, and the facilities were overwhelmed with high patient numbers and a record number of hospitalizations. All these factors contributed to the reluctance of hospital IRBs to entertain independent research requests such as mine. The unusual strain on health care workers because of the pandemic might also have biased responses, considering that this study was about job-related stress and burnout. As a result of the pandemic, I was left with the option to reach

nurses through other means. One of the means was the Texas Nurses Association, which has a membership of over 19,000 throughout the state of Texas.

The Texas Nurses Association had a more structured approach to independent research requests such as mine. The association had a brochure that included its format for partnership and a fee structure based on the number of impressions I needed to send to their membership. Study participants would self-select based on the inclusion criteria spelled out in the recruitment flyer. Another alternative was including participants on the SurveyMonkey platform. Randomization was assumed because SurveyMonkey had a sufficient population on its platform that could self-select based on the informed consent criteria. The survey consisted of four demographic questions and five survey instruments that consisted of Likert-type questions. The SurveyMonkey platform restricted the total number of questions, including the demographic questions, to 50. The total number of questions on my survey was 51. To meet this requirement, I eliminated the demographic question regarding number of hours worked per week. A surprising turn of events was the higher cost per response of the Texas Nurse Association compared to that of the SurveyMonkey platform, which turned out a greater number of participants. SurveyMonkey charges a monthly membership fee and additional optional charges to access participants based on study specific demographic requirements.

### **Demographics**

The goal for using demographic questions in the survey was twofold. The first was to provide an understanding of the sample under study and offer more perspectives. The second was to set up the inclusion criteria to prevent responses by nonqualified

participants. The inclusion criteria were preprogrammed into the survey to prevent the participation of those who did not meet the minimum criteria, such as years of work experience. Respondents with less than 1 year of work experience were redirected to the end of the survey and thanked for their interest.

I eliminated some participant recruitment methods I had originally planned. For example, I had to eliminate the process of seeking permission through hospitals to survey their nurses because the process was cumbersome and most responded that they were not accepting independent research requests. Fortunately, I had proposed three methods of recruitment during my IRB process, and the remaining methods proved more effective. Of the two other methods, 19 responses came from the Texas Nurses Association, and 146 responses came from the Survey Monkey platform. The total responses were 165, and 43 of those were rejected because they did not meet the demographic criterion of years of experience. The final sample size was 122, for a total response completion rate of 73%. There were fewer male respondents (24.8%) than female respondents (73.9%). Two respondents (1.2%) chose not to identify their gender. In terms of years of experience, the largest group was in the category of between 2 and 5 years of work experience (30.9%), whereas the smallest category was nurses with more than 1 year but less than 2 years of experience (15.8%). Those with between 6 and 9 years of experience were in the second largest group (27.3%). Those rejected from the study because they had less than 1 year of work experience comprised 26.1% of the total respondents.

The 26 to 36 years old age bracket was the largest (29.7%) of the distribution. The next largest age bracket was nurses in the age group 18 to 25 years old (17.6%). The smallest age bracket was nurses in the age group older than 53 years old (5.5%).

### **Data Collection**

The target population for sampling was the nurses working in hospitals in Dallas, Texas. These nurse professionals were assumed to hold a bachelor's degree or above, because the state of Texas mandates nurses to have a minimum of a bachelor's degree. Also important to the study was the criterion of a minimum of 1 year of experience because any less experience was deemed insufficient to inform the response of the study. Potential participants were targeted from a list of Dallas-area hospitals. Although the original plan was to contact random samples of participants through an internal email sent by the hospitals to their nurse employees, this did not take place. The second alternative, Texas Nurses Association, has a large membership of nurses and was therefore an attractive recruitment alternative. The third data collection strategy involved targeting members of the nurse population from within the SurveyMonkey platform. Survey questions, and instruments were loaded onto the SurveyMonkey platform upon receiving IRB approval.

The format of participant recruitment was through an emailed flyer. Invitations were sent on November 19, 2020, through the Texas Nurses Association's monthly email newsletter. Respondents were sought through the SurveyMonkey portal's targeted participants on November 24, 2020. The online survey was closed December 22, 2020, upon realizing and exceeding the minimum number of participants. The focus of the three

demographic questions was age group, years of direct work experience, and gender. The fourth demographic question regarding number of hours worked per week was removed to comply with the SurveyMonkey limit of 50 survey questions. The survey instruments were the Job-Related Stress Scale, which contained 13 questions (see Appendix E); the MBI, which included 16 questions (see Appendix D); the flexible work arrangements instrument, which included three questions (see Appendix C); the TIS-6, which had six questions (see Appendix B); and the Menon Employee Empowerment Scale, which had nine questions (see Appendix A).

I estimated 15 minutes would be a sufficient amount of time to complete the survey. The actual average survey completion time was 6 minutes. I abandoned the idea of conducting a hospital nurses survey through their employers after it proved difficult to obtain IRB approvals from hospitals because of the COVID-19 pandemic. Given the prevailing conditions of the pandemic, it appeared that hospital IRBs were not prioritizing independent research partnerships.

The Job-Related Stress Scale consisted of 13 questions along a 5-point Likert-type scale. Some of the questions were “feeling fidgety at work,” “insufficient time spent with family because of work,” “work getting to them more than it should,” and “spending too much time at the job.” Other questions were “perception that the job drives them up the wall,” “perceived less time for other activities besides work,” “feelings of tightness around the chest when thinking about the job,” and feeling like they are “married” to the hospital. Still other questions were “perceived too much work and little time in which to do it,” “feeling guilty when taking time off,” “dreading the phone ringing at home

because it might be work related,” feeling like they “never had a day off”, and “too many people get burned” at work.

The MBI instrument for measuring burnout consisted of questions regarding perception of “influence on work done,” decisions made, “authority to make decisions,” and “capabilities for doing their job well.” Other questions within the instrument included perceived “confidence to work effectively,” “inspiration by organizational achievement plans,” “inspiration by organizational goals,” and “enthusiasm toward organizational objectives.” Six questions comprising the Turnover Intention Scale along a 5-point Likert-type scale measured employees’ attitudes regarding separation of employment. The questions focused on “how often they considered separating from an employer,” “personal satisfaction through fulfillment of personal needs,” and “frequency of frustration with lack of opportunity to achieve work related goals.” Other questions in the TIS-6 included “frequency of dreaming about getting a better job,” the likelihood of “accepting another job if offered,” and “how often one looked forward to another day at work.”

The flexible work arrangements instrument consisted of questions along a 5-point Likert-type scale. These included questions like “feeling that supervisors considered their personal needs when making the work schedule,” “accommodation of request for time off of work when assigning hours of work,” and “perception of supervisor allowance for time off work outside of formal leave and sick time.” The Menon Employee Empowerment Scale consisted of 16 questions along a 5-point Likert-type scale. Questions included “feeling they could influence work in the department,” that they “had an influence on

decisions made in the department,” that they had “authority to make decisions at work,” had the “capabilities required to do their job well,” and “felt enthusiastic about working toward organizational objectives.”

### **Assumptions Testing**

Prior to analysis, I verified the assumptions of a linear regression and a multiple linear regression were verified. The list below contains the assumptions for a multiple linear regression, which were used for RQ3 to RQ6. The assumptions for a linear regression were verified for RQ1 and RQ2. A simple linear regression shares Assumptions 2–5 and 7 with a multiple linear regression. Assumption testing was verified prior to analysis of each research question.

1. Samples sufficiently randomized and optimized by using a G\*Power calculation.
2. Normality of data evidenced with mean = 1 and standard deviation = 0.
3. The sample data assumed an equal distribution of values around the mean. Residuals approximated homoscedasticity. Confirmed by normal P-P plots.
4. Scatterplots should be horizontal with no notable outliers, funnel shaped, or inverted funnel shape around the diagonal line.
5. Absence of multicollinearity between independent variables. Low Eigenvalues, and low variance inflation factors (VIFs) would help confirm the lack of multicollinearity.

## Data Analysis

I used three demographic questions and 47 questions from five instruments in the Survey Monkey web-based data collection method. The three demographic questions were age, years of experience, and gender. Upon completion and closing of the survey, I downloaded the data into an Excel spreadsheet. Of the total collected, I rejected 43 based on inclusion criteria and missing responses. I then further examined the data in Excel and deleted the IP address and email address, survey exit data unrelated to the present study, and other identifying data columns from the file. I also deleted other data from SurveyMonkey, including type of device used for the survey by each participant. I deleted the first row, including the survey prompt questions, as they were unrecognized by the SPSS software. I then imported the cleaned Excel data into SPSS (Version 21) and examined the data set and the label tabs for any abnormalities.

I made the data label tab entries for each data label. The data labels in the study were “age,” “experience,” and “gender.” Other labels were “job-related stress,” “burnout,” “turnover intention,” “employee empowerment,” and “flexible work arrangements.” Next, I categorized the data by label type: nominal, scale, or numeric, as appropriate. The categorical (gender) variable responses were assigned rating keys as 1 = *male*, 2 = *female*, and 3 = *chose not to specify*. The age demographic was rated as 1 = *18–25 years old*, 2 = *26–32 years old*, 3 = *33–39 years old*, 4 = *40–46 years old*, 5 = *47–53 years old*, and 6 = *above 53 years old*. The years of work experience were rated as 1 = *more than 1 year*, 2 = *2–5 years*, 3 = *6–9 years*, and 4 = *less than 1 year*. The variable job-related stress was measured by the Job-related Stress Scale. The Job-related Stress



Scale consisted of 13 questions with a 5-point Likert-type scale. The scale was rated as 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, 5 = *strongly agree*. The MBI scale consisted of 16 questions and a 6-point Likert-type scale. The ratings used were 1 = *never*, 2 = *rarely*, 3 = *sometimes*, 4 = *do not know*, 5 = *occasionally*, 6 = *often*. The Maslach Burnout Index was reverse scored. For example, for the question “I love my job and am happy with my work,” the respondents’ answers were flipped so that 1 was scored as 5, and 5 was scored as 1, so that a high score would still indicate high burnout. A summary of rating keys used in the study is found in Appendix S.

The flexible work arrangements instrument consisted of three questions and a 5-point Likert-type scale. The ratings applied were 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, 5 = *strongly agree*. The Turnover Intention Scale consisted of six questions and a 5-point Likert-type scale. The rating applied was as follows: 1 = *never*, 2 = *rarely*, 3 = *sometimes*, 4 = *occasionally*, and 5 = *always*. The instrument selected to measure employee empowerment was the Menon Employee Empowerment Scale. The Menon Employee Empowerment Scale contained nine questions and a 5-point Likert-type scale. The response ratings were set as follows: 1 = *strongly disagree*, 2 = *moderately disagree*, 3 = *mildly disagree*, 4 = *mildly agree*, 5 = *moderately agree*. I set these ratings in the variable view tabs. The labels were also written for each of the variables. I established measure types for each data category: age as scale, gender as nominal, and experience as nominal.

With regard to the Maslach Burnout Index, one of the seven items was missing throughout the study. It was established that the error occurred during the survey set on

the web-portal SurveyMonkey. The missing scale item was number 4. The affected scale response was *once a week*. All responses missed this response in the data. After examining the results, I was unable to establish the effect of the lack of this response item on the analysis outcomes. It appeared that the results of the instruments' response support current literature using a similar measure. At this point, I had coded all the values appropriately to ensure that all strings had numeric values. I subjected the data to analysis using SPSS. The first treatment was the analysis of distribution on sociodemographic characteristics (gender, age, work experience) among the study participants.

The distribution of the relationship between burnout and turnover intention of nurses is presented in Table 2. I computed simple linear regression to determine the relationship of job-related stress on the turnover intention of nurses. Another simple linear regression was conducted to determine the relationship between burnout and turnover intention. Multiple linear regression was performed to verify the interaction effect of job-related stress and flexible working environment on the turnover intention of nurses. Separately, I conducted another multiple linear regression to determine the interaction effect of job-related stress and employee empowerment and turnover intention. The fifth and sixth analyses involved conducting multiple linear regression analyses of the interaction effect of burnout and flexible working arrangement and burnout and employee empowerment on turnover intention, respectively. The independent variables were job-related stress and burnout. The moderator variables were flexible working arrangements and employee empowerment, respectively, while the dependent variable was turnover intention of nurses.

## Study Results

This study was conducted to evaluate the effect of job-related stress or burnout (or both) on turnover intention of nurses. The independent variables or predictor variables were described as job-related stress and burnout, the dependent or response variable was turnover intention of nurses, and moderator variables were flexible working arrangement and employee empowerment. Both descriptive statistics (frequency and percentages) and inferential statistics (linear and multiple linear regression) were computed to verify the hypotheses in the study. A  $p$  value less than or equal to .05 ( $p \leq .05$ ) was statistically significant. I analyzed all data using SPSS software (Version 21), and the findings are presented in tables and figures.

Of the 165 volunteer participants on the survey, 43 were excluded in accordance with the exclusion criteria, for a total participant tally of 122 against the study sample goal of 120. Of these participants, the majority ( $n = 122$ , 73.9%) were females, 41 (24.8%) were males, and the remaining two (1.2%) opted not to disclose their gender. Regarding the age of the study participants, 49 (29.7%) were aged between 26 and 32 years, 43 (26.1%) were aged between 33 and 39 years, 29 (17.6%) were aged between 18 and 25 years, and 24 (14.5%) were aged between 40 and 46 years. About 11 (6.7%) and nine (5.5%) were aged between 47 and 53 years and above 53 years, respectively. The largest group of respondents were aged between 26 and 39 years old, while 13% of total respondents were 40 years or older. The majority of respondents indicated that they had been a hospital nurse for 2 to 5 years (30.9%) or 6 to 9 years (27.3%). About a quarter of

respondents reported less than 1 year of experience as a hospital nurse (26.1%).

Frequencies and percentages for the demographic distribution are presented in Table 1.

**Table 1**

*Frequencies and Percentages for Nominal and Ordinal Variables*

Variable	<i>n</i>	%
Gender		
Male	41	24.8
Female	122	73.9
Chose not to specify	2	1.2
Age		
18–25	29	17.6
26–32	49	29.7
33–39	43	26.1
40–46	24	14.5
47–53	11	6.7
>53	9	5.5
Years worked as a hospital nurse		
18–25	26	15.8
26–32	51	30.9
33–39	45	27.3
40–46	43	26.1

I used five instruments in the study survey. These comprised two independent variables (job-related stress and burnout), one dependent variable (turnover intention), and two moderator variables (flexible work arrangements and employee empowerment), as presented in Table 2.

**Table 2***Instruments Used in Present Study*

Variable	Number of questions	Variable type
Turnover intention	6	Dependent
Job-related stress	13	Independent
Burnout	16	Independent
Flexible work arrangements	3	Moderator
Employee empowerment	9	Moderator

I computed the basic descriptive statistics of means and standard deviations, in addition to tests for skewness and kurtosis. Skewness and kurtosis for each variable (see Table 3) were well within the bounds of  $-1$  to  $+1$ , which means the data distribution was relatively normal and I could employ parametric tests (i.e., linear regression). In this case, excess skewness would have been indicated by a lopsided normal curve. Excess kurtosis would mean that the normal curve had bigger tails, therefore indicating more extreme values away from the mean values, or even a double-domed normal curve.

**Table 3***Descriptive Statistics for Variables of Interest*

Variable (instrument)	<i>N</i>	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>	Skewness	Kurtosis
Turnover intention (TIS)	121	1.17	4.50	2.96	0.78	-0.51	-0.27
Job-related stress (JRS)	117	1.00	4.92	3.46	0.70	-0.59	0.59
Burnout (MBI)	121	1.13	4.38	2.96	0.70	-0.08	-0.55
Flexible working arrangement (flexible work arrangement instrument)	123	1.00	5.00	3.27	0.83	0.05	-0.34
Employee empowerment (MEES)	123	2.33	6.00	4.39	0.79	-0.05	-0.55

RQ1: What is the predictive relationship, if any, of job-related stress on the turnover intention of nurses?

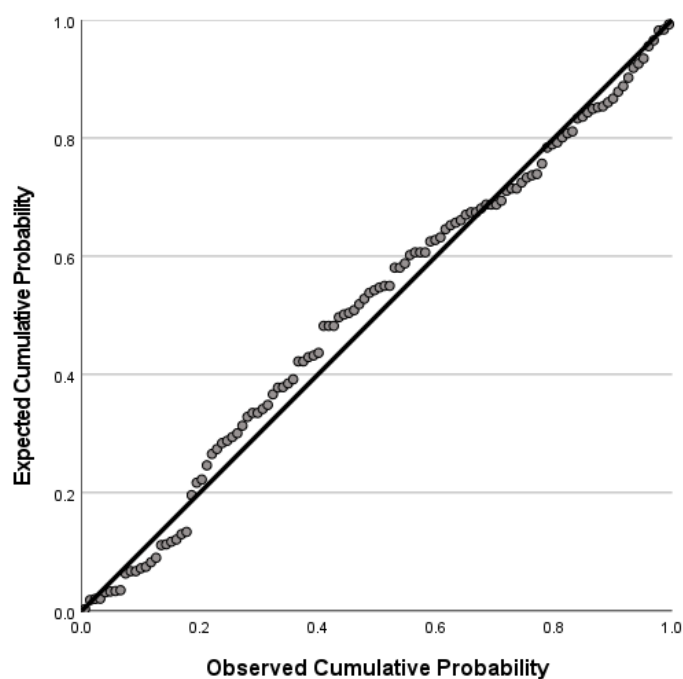
$H_{01}$ : The level of job-related stress is not a statistically significant predictor of the turnover intention of nurses.

$H_{a1}$ : The level of job-related stress is a statistically significant predictor of the turnover intention of nurses.

To address RQ1, I conducted a linear regression between job-related stress and turnover intention. Prior to analysis, I tested the assumptions of the linear regression. I verified normality with a P-P scatterplot. The data followed the normality trend line, indicating that the assumption was met (see Figure 6).

### Figure 6

*Normal P-P Scatterplot for Relationship Between Job-Related Stress and Turnover Intention*



A residuals scatterplot verified homoscedasticity. The absence of a clear pattern supported that the data were homoscedastic (see Figure 7).

### Figure 7

*Residuals Scatterplot for Relationship Between Job-Related Stress and Turnover Intention*

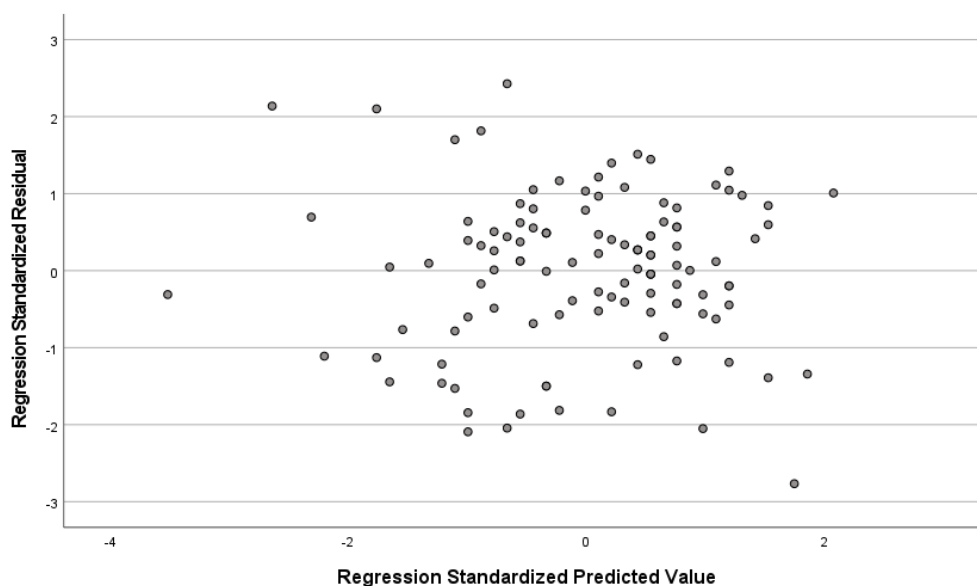


Table 4 includes the descriptive statistics for the job-related stress and turnover intention variables for RQ1.

### Table 4

*Descriptive Statistics for Job-Related Stress and Turnover Intention*

Variable	<i>n</i>	<i>M</i>	<i>SD</i>
Job-related stress	116	3.47	0.70
Turnover intention	116	2.98	0.78

The results of the linear regression were statistically significant,  $F(1, 114) = 42.54, p < .001$ , indicating that job-related stress significantly predicted turnover

intention. The coefficient of determination ( $R^2$ ) indicated that 52% of the variation in turnover intention could be explained by job-related stress. With every one-unit increase in job-related stress ( $B = 0.58, t = 6.52, p < .001$ ), turnover intention scores increased by approximately 0.58 units. Due to significance of the regression, I rejected  $H_01$ .

RQ2: What is the predictive relationship, if any, of burnout on the turnover intention of nurses?

$H_02$ : The level of burnout is not a statistically significant predictor of the turnover intention of nurses.

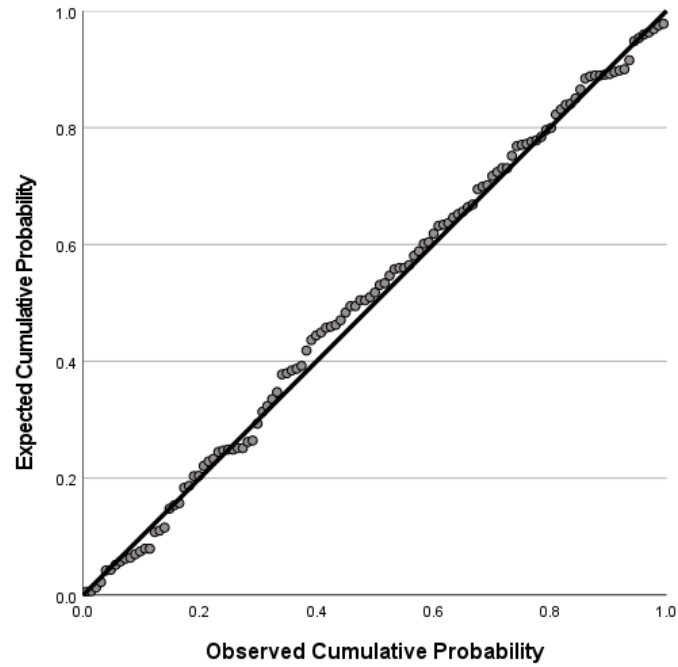
$H_{a2}$ : The level of burnout is not a statistically significant predictor of the turnover intention of nurses.

To address RQ2, I conducted a linear regression between burnout and turnover intention. Prior to analysis, I tested the assumptions of the linear regression. I verified normality with a P-P scatterplot. The data followed the normality trend line, indicating that the assumption was met (see Figure 8).



**Figure 8**

*Normal P-P Scatterplot for Relationship Between Burnout and Turnover Intention*



I verified homoscedasticity with a residual's scatterplot. The absence of a clear pattern supported that the data were homoscedastic (see Figure 9).

**Figure 9**

*Residuals Scatterplot for Relationship Between Burnout and Turnover Intention*

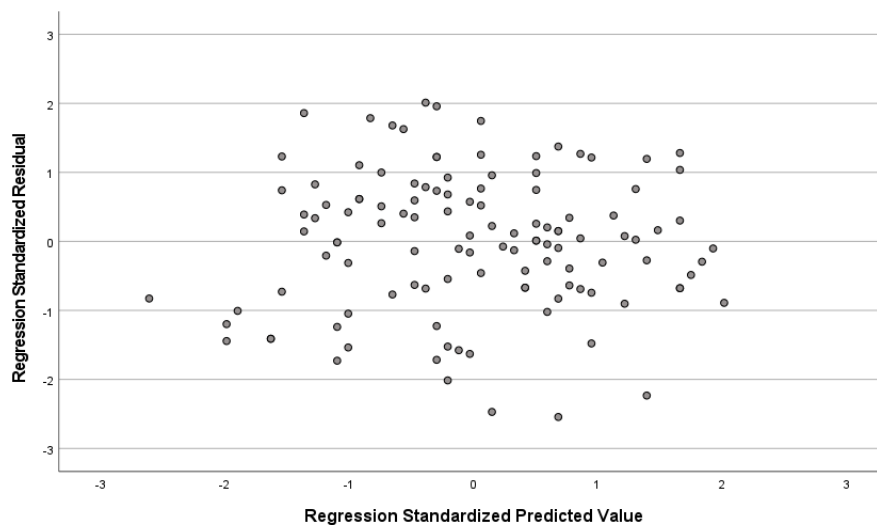


Table 5 contains the descriptive statistics for the burnout and turnover intention variables for RQ2.

**Table 5**

*Descriptive Statistics for Burnout and Turnover Intentions*

Variable	<i>n</i>	<i>M</i>	<i>SD</i>
Burnout	119	2.96	0.71
Turnover intention	119	2.96	0.79

The results of the linear regression were statistically significant,  $F(1, 117) = 41.93, p < .001$ , which indicated that burnout significantly predicted turnover intention. The coefficient of determination ( $R^2$ ) indicated that 26% of the variation in turnover intention could be explained by burnout. With every one-unit increase in burnout ( $B = 0.58, t = 6.52, p < .001$ ), turnover intention scores increased by approximately 0.58 units. Due to significance of the regression, I rejected  $H_02$ .

RQ3: What is the interaction effect, if any, of job-related stress and flexible working environment on the turnover intention of nurses?

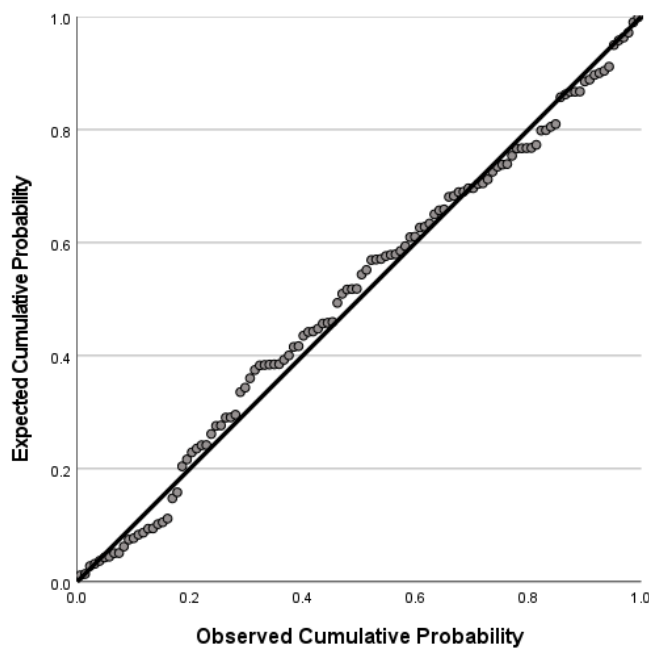
$H_03$ : Flexible working environment does not moderate the relationship between job-related stress and the turnover intention of nurses.

$H_a3$ : Flexible working environment moderates the relationship between job-related stress and the turnover intention of nurses.

To address RQ3, I conducted a multiple linear regression between job-related stress, flexible working environment, and turnover intention. Prior to analysis, I tested the assumptions of the linear regression. I verified normality with a P-P scatterplot. The data followed the normality trend line, indicating that the assumption was met (see Figure 10).

### Figure 10

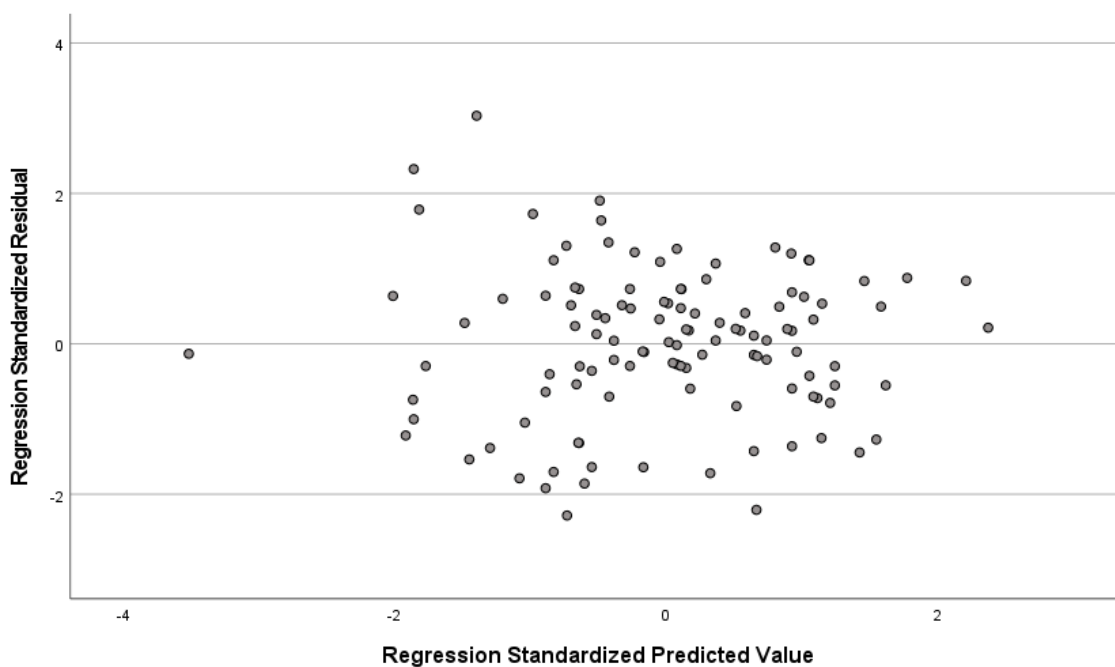
*Normal P-P Scatterplot for Relationship Between Job-Related Stress, Flexible Work Arrangement, and Turnover Intention*



I verified homoscedasticity with a residual's scatterplot. The absence of a clear pattern supported that the data were homoscedastic (see Figure 11).

**Figure 11**

*Residuals Scatterplot for Relationship between Job-Related Stress, Flexible Work Arrangement, and Turnover Intention*



I checked the absence of a multicollinearity assumption with VIFs. All the VIF values were below 10 (VIF = 1.03), which indicated that there was not a strong association between the predictors, and the assumption was met. Appendix T and Appendix U show that residual statistics and collinearity diagnostics, respectively, support findings observed in Table 8.

Table 6 presents the descriptive statistics of the independent variable job-related stress, the dependent variable turnover intention, and the moderator variable flexible work arrangement.

**Table 6**

*Descriptive Statistics for Job-Related Stress, Flexible Work Arrangement, and Turnover Intention*

Variable	<i>n</i>	<i>M</i>	<i>SD</i>
Job-related stress	116	3.47	0.70
Flexible work arrangement	116	3.25	0.83
Turnover intention	116	2.98	0.78

The results of the linear regression in Table 7 were statistically significant,  $F(2,113) = 26.58, p < .001$ , which indicated that job-related stress and flexible work arrangements significantly predicted turnover intention. The coefficient of determination ( $R^2$ ) indicated that 32% of the variation in turnover intention could be explained by job-related stress and flexible work arrangement. While in the presence of job-related stress, with every one-unit increase in flexible work arrangements ( $t = -2.83, B = 0.54, p = .006$ ), turnover intention scores decreased by about 0.54 units. Due to the significance of flexible work arrangements in the presence of job-related stress, moderation was supported, and I rejected  $H_03$ .

**Table 7**

*Results for Multiple Regression With Job-Related Stress and Flexible Work Arrangements Predicting Turnover Intention*

Variable	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
Job-related stress	0.54	0.09	.48	6.14	<.001
Flexible work arrangements	-0.21	0.07	-.22	-2.83	.006

*Note.*  $F(2, 113) = 26.58, p < .001, R^2 = 0.32$ .

RQ4: What is the interaction effect, if any, of job-related stress and employee empowerment on the turnover intention of nurses?

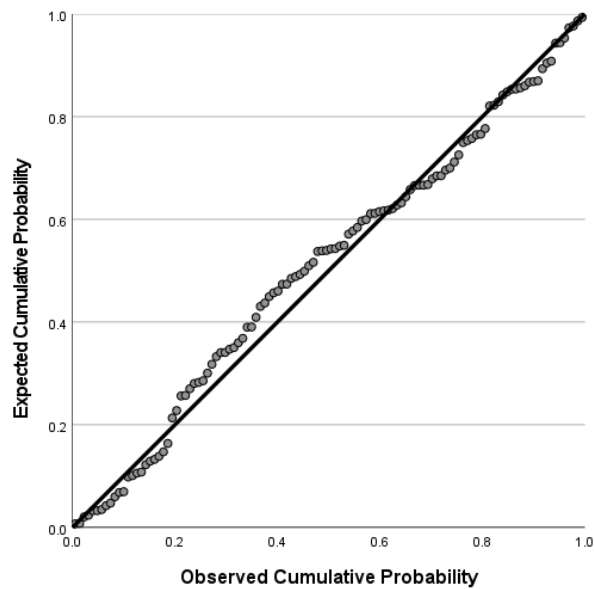
$H_04$ : Employee empowerment does not moderate the relationship between job-related stress and the turnover intention of nurses.

$H_{a4}$ : Employee empowerment moderates the relationship between job-related stress and the turnover intention of nurses.

To address RQ4, a multiple linear regression was conducted between job-related stress, employee empowerment, and turnover intention. Prior to analysis, I tested the assumptions of the linear regression. I verified normality with a P-P scatterplot. The data followed the normality trend line, indicating that the assumption was met (see Figure 12).

### Figure 12

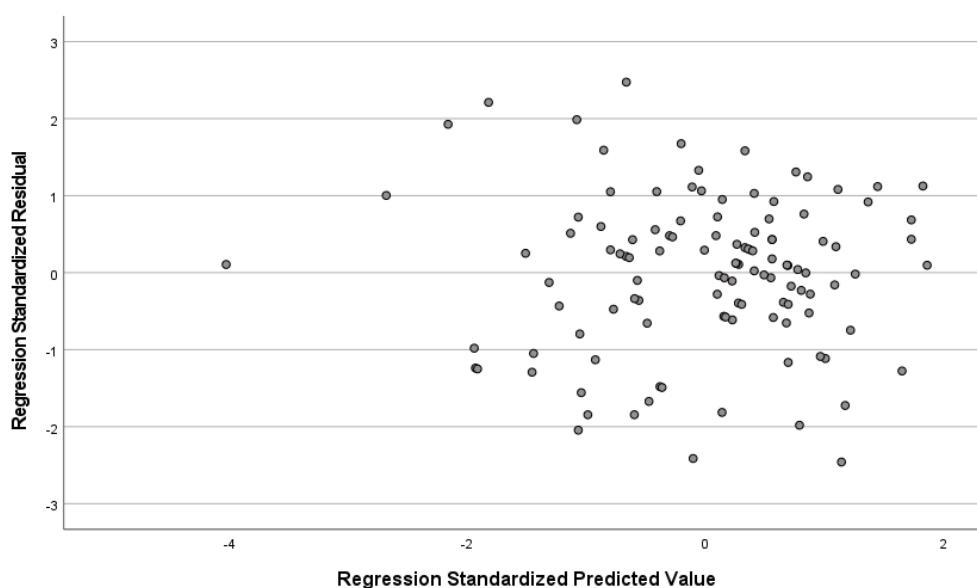
*Normal P-P Scatterplot for Relationship Between Job-Related Stress, Employee Empowerment, and Turnover Intention*



I verified homoscedasticity with a residual's scatterplot. The absence of a clear pattern supported that the data were homoscedastic (see Figure 13).

**Figure 13**

*Residuals Scatterplot for Relationship Between Job-Related Stress, Employee Empowerment, and Turnover Intention*



I checked the absence of a multicollinearity assumption with VIFs. All the VIF values were below 10 (VIF = 1.01), which indicated that there was not a strong association between the predictors, and the assumption was met. Appendix V and Appendix W indicate the residual statistics and collinearity diagnostics, respectively. The descriptive statistics of the independent variable job-related stress, the dependent variable turnover intention, and the moderator variable employee empowerment can be seen in Table 8.

**Table 8**

*Descriptive Statistics for Job-Related Stress, Employee Empowerment, and Turnover Intention*

Variable	<i>n</i>	<i>M</i>	<i>SD</i>
Job-related stress	116	3.47	0.70
Employee empowerment	116	4.41	0.79
Turnover intention	116	2.98	0.78

The results of the linear regression were statistically significant,  $F(2, 113) = 23.71, p < .001$ , which indicated that job-related stress and employee empowerment significantly predicted turnover intention. The coefficient of determination ( $R^2$ ) indicated that 30% of the variation in turnover intention could be explained by job-related stress and employee empowerment. Employee empowerment was not a significant predictor in the model ( $t = -1.96, B = -0.15, p = .053$ ). Due to the non-significance of employee empowerment in the presence of job-related stress, moderation was not supported, and I did not reject  $H_04$ . Table 9 presents the findings of the multiple linear regression.

**Table 9**

*Results for Linear Regression With Job-Related Stress and Employee Empowerment Predicting Turnover Intention*

Variable	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
Job-related stress	0.60	0.09	.53	6.74	<.001
Employee empowerment	-0.15	0.08	-.16	-1.96	.053

*Note.*  $F(2, 113) = 23.71, p < .001, R^2 = 0.30$

RQ5: What is the interaction effect, if any, of burnout and flexible working arrangement on the turnover intention of nurses?

$H_05$ : Flexible working arrangement does not moderate the relationship between burnout and the turnover intention of nurses.

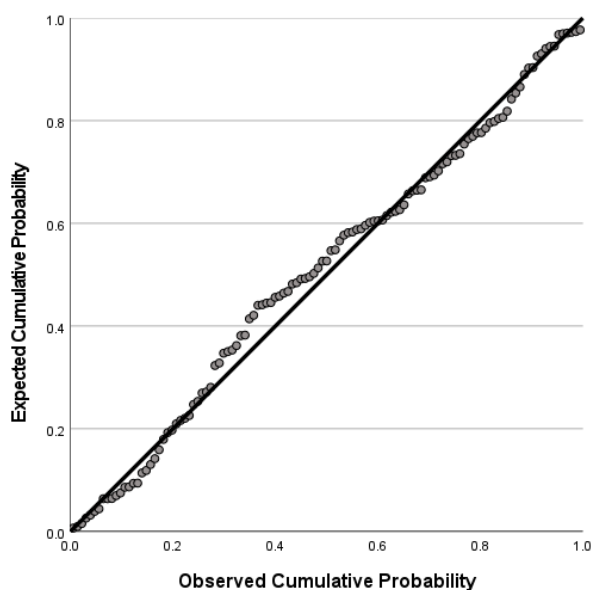


$H_{a5}$ : Flexible working arrangement moderates the relationship between burnout and the turnover intention of nurses.

To address research question five, a multiple linear regression was conducted between burnout, flexible working arrangement, and turnover intention. Prior to analysis, I tested the assumptions of the linear regression. I verified normality with a P-P scatterplot. The data followed the normality trend line, indicating that the assumption was met (see Figure 14).

#### Figure 14

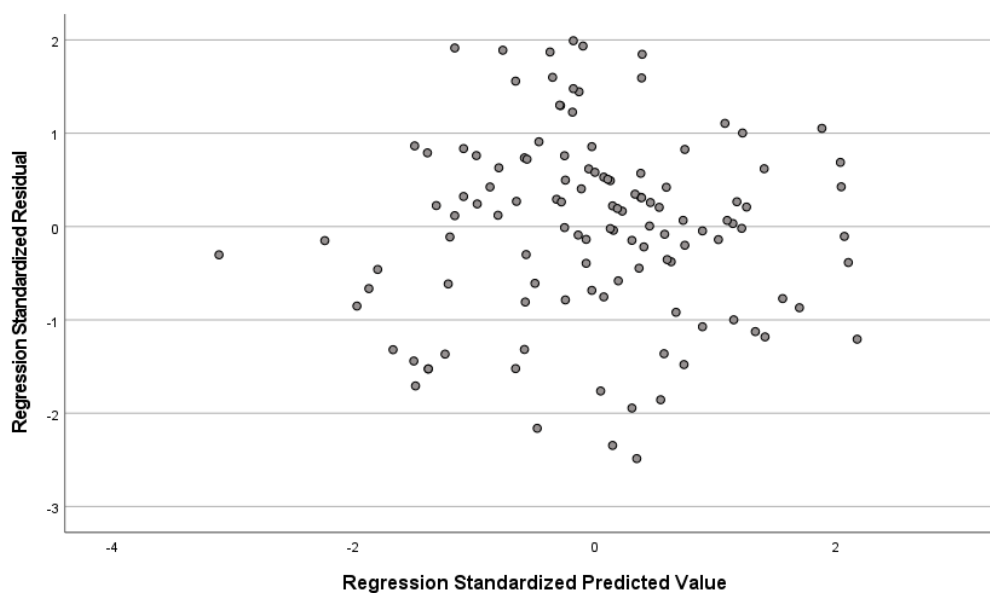
*Normal P-P Scatterplot for Relationship Between Burnout, Flexible Working Arrangements, and Turnover Intention*



I verified homoscedasticity with a residual's scatterplot. The absence of a clear pattern supported that the data were homoscedastic (see Figure 15).

**Figure 15**

*Residuals Scatterplot for Relationship Between Burnout, Flexible Working Arrangements, and Turnover Intention*



The absence of multicollinearity assumption was checked with VIFs. All the VIF values were below 10 ( $VIF = 1.02$ ), which indicated that there was not a strong association between the predictors, and the assumption was met. In Appendix X and Appendix Y, it is possible to see that residual statistics and collinearity diagnostics, respectively.

Table 10 contains the descriptive statistics of the independent variable burnout, the dependent variable turnover intention, and the moderator variable flexible working arrangement.

**Table 10**

*Descriptive Statistics for Burnout, Flexible Work Arrangements, and Turnover Intention*

Variable	<i>n</i>	<i>M</i>	<i>SD</i>
Burnout	119	2.96	0.70
Flexible work arrangements	119	3.26	0.84
Turnover intention	119	2.95	0.79

The results of the linear regression were statistically significant,  $F(2, 116) = 29.32, p < .001$ , indicating that burnout and flexible work arrangements significantly predicted turnover intention. The coefficient of determination ( $R^2$ ) indicated that 33.6% of the variation in turnover intention could be explained by burnout and flexible work arrangements. Flexible work arrangements were a significant predictor in the model ( $t = -3.56, B = -0.26, p < .001$ ). Due to significance of flexible work arrangements in the presence of burnout, moderation was supported, and I rejected  $H_{05}$ . Table 11 presents the findings of the multiple linear regression.

**Table 11**

*Results for Multiple Regression With Burnout and Flexible Work Arrangements Predicting Turnover Intention*

Variable	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
Burnout	0.54	0.09	.48	6.23	<.001
Flexible work arrangements	-0.26	0.07	-.27	-3.55	.001

*Note.*  $F(2, 116) = 29.32, p < .001, R^2 = 0.336$

RQ6: What is the interaction effect, if any, of burnout and employee empowerment on the turnover intention of nurses?

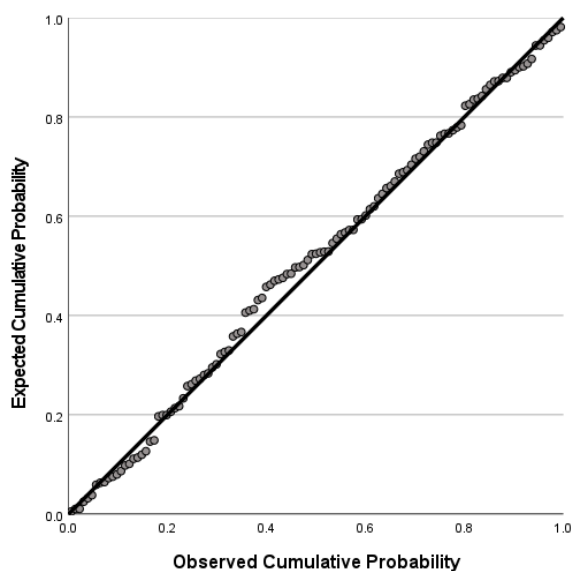
$H_{06}$ : Employee empowerment does not moderate the relationship between burnout and the turnover intention of nurses.

$H_{a6}$ : Employee empowerment moderates the relationship between burnout and the turnover intention of nurses.

To address RQ6, I conducted a multiple linear regression between burnout, employee empowerment, and turnover intention. Prior to analysis, I tested the assumptions of the linear regression. I verified normality with a P-P scatterplot. The data followed the normality trend line, indicating that the assumption was met (see Figure 16).

### Figure 16

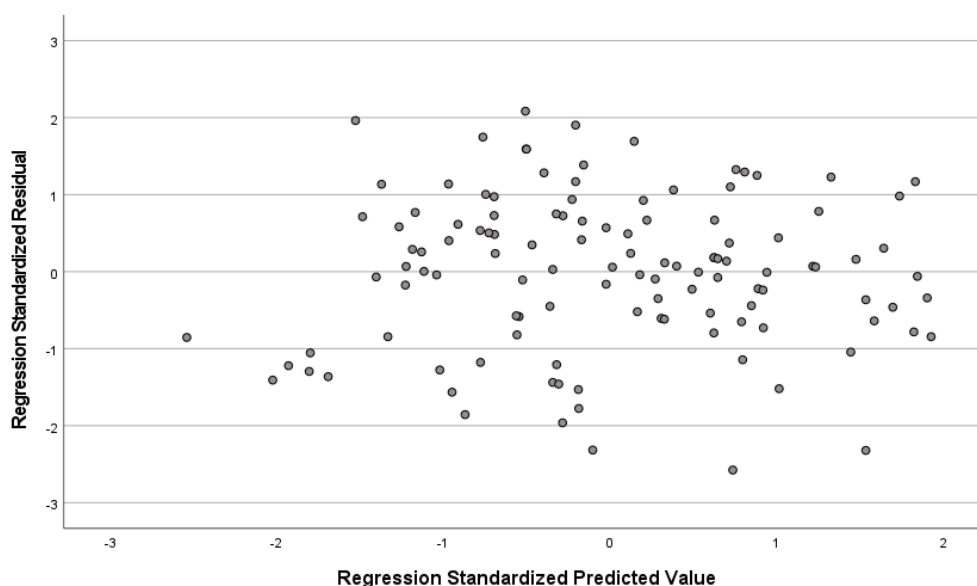
*Normal P-P Scatterplot for Relationship Between Burnout, Employee Empowerment, and Turnover Intention*



Homoscedasticity was verified with a residual's scatterplot. The absence of a clear pattern supported that the data were homoscedastic (see Figure 17).

**Figure 17**

*Residuals Scatterplot for Relationship Between Burnout, Employee Empowerment, and Turnover Intention*



The absence of multicollinearity assumption was checked with VIFs. All the VIF values were below 10 ( $VIF = 1.16$ ), which indicated that there was not a strong association between the predictors, and the assumption was met. Appendix Z and Appendix AA show the residual statistics and collinearity diagnostics, respectively.

The descriptive statistics of the independent variable burnout, the dependent variable turnover intention, and the moderator variable employee empowerment can be seen in Table 12.

**Table 12**

*Descriptive Statistics for Burnout, Employee Empowerment, and Turnover Intention*

Variable	<i>n</i>	<i>M</i>	<i>SD</i>
Burnout	119	2.96	0.70

Employee empowerment	119	3.26	0.84
Turnover intention	119	2.95	0.79

The results of the linear regression were statistically significant,  $F(2, 116) = 21.24, p < .001$ , indicating that burnout and employee empowerment significantly predicted turnover intention. The coefficient of determination ( $R^2$ ) indicated that 26.8% of the variation in turnover intention could be explained by burnout and employee empowerment. Employee empowerment was not a significant predictor in the model ( $t = 0.82, B = 0.07, p = .415$ ). Due to no significance of employee empowerment in the presence of burnout, moderation was not supported, and I did not reject  $H_06$ . Table 13 presents the findings of the multiple linear regression.

**Table 13**

*Results for Multiple Regression With Burnout and Employee Empowerment Predicting Turnover Intention*

Variable	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
Burnout	0.61	0.10	.54	6.31	<.001
Employee empowerment	0.07	0.09	.07	0.82	.415

*Note.*  $F(2, 116) = 21.24, p < .001, R^2 = 0.268$ .

### Summary

In this chapter I presented the statistical analysis results from the survey data. I tested six hypotheses to provide answers to six research questions. Descriptive statistics provided insight into the population under study. There was a total of 165 responses to the online survey, and I rejected 43 because of the exclusion criteria of minimum years of experience. I used 122 complete surveys in the data analysis, which yielded a response rate of 73%. I downloaded the data into Excel and uploaded them into SPSS statistical

analysis software. I then performed analyses to test each variable to determine relationships with each other. For the proposed linear relationship, I tested two independent variables (job related stress and burnout) against the dependent variable turnover intention. Linear regression was used. I tested direct relationships again for each independent variable, this time with an additional factor. These factors were potential moderating variables. The two moderator variables used were flexible work arrangements and employee empowerment. I tested each for possible effect on the direct relationships. I used multiple linear regression, and I tested direct and indirect effects under the proposed conceptual model.

The data analysis results show support for two of the six hypotheses. Four hypotheses were rejected or not supported. For RQ1, I rejected the null hypothesis, as there was a significant relationship between job-related stress and turnover intention. For RQ2, I rejected the null hypothesis, as there was a significant relationship between burnout and turnover intention. For RQ3, I rejected the null hypothesis, as there was a significant interaction (moderation) between job-related stress and flexible work arrangements on the relationship between job-related stress and turnover intention, but alone the flexible work arrangements had a weak relationship with turnover intention. For RQ4, the data supported the null hypothesis. Employee empowerment had no significant influence on the relationship between job-related stress and turnover intention, but employee empowerment alone had a weak relationship with turnover intention. For RQ5, I rejected the null hypothesis that burnout and flexible work arrangements did not have an interactive effect on turnover intention. Alone, flexible work arrangements had a weak

effect on turnover intention. For RQ6, the data supported the null hypothesis. Employee empowerment did not have a significant influence on the relationship between burnout and turnover intention, but employee empowerment alone did not have a strong effect on turnover intention. Whereas both moderating variables (flexible work arrangements and employee empowerment) had positive interactive effect with each variable, they nevertheless each separately and individually had weak direct relationships with turnover intention.

In Chapter 5, I present an overview of the major findings of this study. I make some recommendations for future study on the topic and what these results mean for social change, especially in times in which a pandemic and a growing aging population place additional strain on nurses.



## Chapter 5: Discussion, Conclusion, and Recommendations

### **Introduction**

The purpose of this quantitative nonexperimental survey study was to test the social exchange theory (Emerson, 1976) that relates to reciprocity of human actions and behaviors. The theory was applied in evaluating the effect of job-related stress and burnout (independent variables) on turnover intention (dependent variable) of hospital nurses in Dallas, Texas. Job-related stress refers to the psychological condition of feeling emotionally and physically exhausted from work. Burnout is the feeling of detachment and indifference towards one's work. Turnover intention refers to thoughts of seeking to separate or leave the employment relationship. The study involved separately testing the effect of two additional variables on the relationship between job-related stress and burnout. These additional variables were flexible working arrangements and employee empowerment. Flexible working arrangements are the formal arrangements between employer and employee concerning working hours and job completion. Employee empowerment refers to the set of actions taken by an employer to enable employees to perform their jobs better.

The study design consisted of plans to collect data online from 120 hospital nurses in Dallas, Texas, through the SurveyMonkey portal. Results indicated that there was a statistically significant relationship between job-related stress and turnover intention. For this reason, I rejected the null hypothesis under RQ1, which predicted that the level of job-related stress is not statistically a significant predictor of turnover intention of nurses. I also rejected the null hypothesis for RQ2. Specifically, the

coefficient of determination ( $R^2 = .264$ ) indicated that 26.4% of the variation occurring in the dependent variable turnover intention was attributed to the independent variable burnout. This means that, although it was a factor, burnout alone was not a strong consideration for leaving. Specifically, 73.6% of the variation in turnover intention could not be accounted for by the independent variable burnout. I rejected the null hypothesis for RQ3 that stated there was no interactive effect of flexible working arrangements on the relationship between job related stress and turnover intention. I failed to reject the null hypothesis for RQ4, which stated that there was no significant interaction effect of employee empowerment on the relationship between job related stress and turnover intention of nurses. These results meant that, although burnout contributed to increasing turnover intentions, flexible working arrangements could lessen turnover intention. I plotted residuals to check for multicollinearity and found no signs of multicollinearity. All the VIF values were below 10, which indicated the absence of multicollinearity. I rejected the null hypothesis for RQ5, but I failed to reject the null hypothesis for RQ6 that stated there was no significant interaction effect of employee empowerment on the relationship between burnout and employee empowerment.

This study is significant because the results led to more precise empirical evidence about the nature of the relationship between the main variables of the study. New empirical evidence was obtained regarding the proposed moderating influence of flexible working arrangements and employee empowerment. From a management perspective, managers could use the results of the study to create new strategies for offsetting the turnover intention of nurses. The remainder of this chapter includes a

discussion of the findings in greater depth. I present an interpretation of the findings first, followed by a discussion of the limitations introduced in Chapter 1 and ways in which they potentially influenced results. I then offer recommendations for future research and practice, discuss implications of the findings, and draw conclusions about the results of the study.

### **Interpretation of the Findings**

This section contains a recapitulation of the main findings of this study. The section includes a discussion on connections with the literature presented in Chapter 2 and consideration as to whether findings from this study align with previous research and theory. Also discussed are ways in which this study extends prior evidence connecting job-related stress, burnout, and turnover intention in nurses.

There is a statistically significant relationship between job-related stress and turnover intention. For this reason, I rejected the null hypothesis for RQ1, which predicted that the level of job-related stress is not a statistically significant predictor of turnover intention of nurses. This finding aligns with research presented in Chapter 2 by Lo et al. (2017), Whittaker et al. (2018), and Andresen et al. (2017) in health care; Castelló et al. (2017) in academia, Wilson (2016) in social work, and Cheng and Yang (2018) in the hospitality industry. Employees who have reported feeling burnout cited reasons such as an inability to achieve a favorable work–life balance (Devine & Hunter, 2017), isolation (Brown, 2017), and a perceived lack of support (Khamisa et al., 2016).

Nurses face a set of challenges due to the nature of their work, such as time constraints, competing demands from various members of the health care team, the

challenges of clinical work, constant changes in rules of work, a lack of control over work scheduling, and conflicting relationships with management. These challenges can contribute to job burnout among nurses (Bridgeman & Barone, 2018). Results from this study confirmed that job-related stress increases the risk of turnover. The results also indicated that using organizational management strategies could reduce the risk of turnover.

I also rejected the null hypothesis for RQ2, with 26.4% of the variation occurring in the dependent variable turnover intention influenced by the independent variable burnout. The independent variable burnout could not account for 73.6% of the variation of turnover intention. Thus, although it was a factor, burnout alone was not a strong consideration for turnover. Although it is apparent that factors in addition to burnout predict turnover intention, burnout did explain a substantial portion of the variance in the outcome turnover intention in literature (Reader et al., 2017; Zhou et al., 2017). Another factor may include organizational support. Organizational support helped override the negative impacts of burnout on turnover intentions (Robson & Robson, 2016). Robson and Robson (2016) carried out a quantitative study on 433 National Health Service nurses in the United Kingdom to examine the relationships between affective commitment, intention to leave, and workplace experiences. Robson and Robson sought to determine whether perceived organizational support and characteristics of leader–member exchange influenced nurses' intention to leave their job. Their study results indicated that burnout was a significant predictor of turnover intention and that other factors could influence the relationship between burnout and turnover intention. When workers are empowered and

have more autonomy, they appear to be better able to cope with job-related stress and burnout.

Findings from this study supported the hypotheses by Brown (2017) and Khamisa et al. (2016) that perceived organizational support significantly influences turnover intention. Perceived organizational support influenced the nature of exchange between managers and employees. These findings indicate that negative perceptions of organizational support would result in an increased desire to leave (Robson & Robson, 2016). When there is sufficient organizational support, employees may not leave despite experiencing burnout. Yu et al. (2016) identified organizational support, more training, and high levels of cognitive empathy as protective factors against burnout. This suggests that employee behavior and management actions can affect burnout among nurses.

Although burnout is common among high-stress professions such as firefighting, air traffic control, teaching, and health care, nurses are particularly prone to developing BOS because of high workloads, frequent staff shortages, inflexible schedules, and the moral challenges they face as part of their job (Byung-Kwang et al., 2016; Paul et al., 2018; Salvarani et al., 2019). Burnout Syndrome can interfere with nurses' ability to provide quality patient care by limiting their ability to emotionally engage with patients. Burnout Syndrome can also cause psychological stress (Moss et al., 2016). Several researchers have established a relationship between burnout, often taken as a sign of declining mental health, and turnover (Guo et al., 2019; Lo et al., 2018; Whittaker et al., 2018). Strategies that managers can employ to increase nurse retention as it relates to burnout include providing more organizational support, increasing the duration of

training, and designing interventions to increase cognitive empathy (Yu et al., 2016).

Results from this study extend previous evidence by Huyghebaert et al. (2019) that showed greater organizational support and empowerment can help employees cope with job-related stress.

I rejected the null hypothesis to RQ3 that stated there was no interactive effect of flexible working arrangements on the relationship between job-related stress and turnover intention. It is important to note the lack of literature on two of the management strategies central to this study: flexible working arrangements and employee empowerment.

Research presented by Berridge et al. (2018), Brook et al. (2019), and Khamisa et al. (2016) established that management policies, including flexible working arrangements and employee empowerment strategies, can impact nurses' perception of their jobs.

Linkages between employee empowerment, flexible schedules, and turnover rates remain largely unexplored despite a general agreement within the human resources literature that these factors can increase turnover (Sergio & Rylova, 2018; Zhang et al., 2018). Several studies specific to the nursing industry have found that nurses would feel better about their jobs if they had more flexible schedules and felt like they had more of an authoritative voice in their organization (Bridgeman et al., 2018; Clendon & Walker, 2016), yet the moderating effect these variables can have on job-related stress and burnout remains largely untested. Findings from the present study help fill the gap in knowledge related to the third hypothesis that flexible working arrangements have an effect on job-related stress and turnover intention (Onnis, 2017).

The data supported the null hypothesis for RQ4, which stated there was no significant interaction effect of employee empowerment on the relationship between job-related stress and turnover intention of nurses. These results indicated that, although burnout contributes to increasing turnover intentions, flexible working arrangements could lessen turnover intention. These findings help expand the small body of literature that focuses specifically on employee empowerment in the nursing industry. Khamisa et al. (2016) identified a lack of support as a strong predictor of negative well-being in nurses and Li et al. (2018) emphasized the need for employee empowerment. The literature contains extensive evidence regarding the benefits of employee empowerment on work outcomes and nurse well-being (Asiri et al., 2016; Li et al., 2018; Shah et al., 2018). Results from these studies indicated that nurses who feel as if their work is of no value to their organization may feel less motivated. Managers could make nurses feel more important by changing their behaviors. It is important that managers consider how they can help their employees feel more valuable in the workplace. There is a sizable amount of research on the link between employee empowerment and other dependent variables. By contrast, there is a lack of studies on the moderating effect that management strategies such as employee empowerment can have on job-related stress and burnout. Employee empowerment did not moderate the interaction between job-related stress and turnover intention, nor did it moderate the interaction between burnout and turnover intention. These findings supported Kebriaei et al.'s (2016) findings of the lack of a moderating effect of employee empowerment on turnover intention.

The results of the present study also indicate that, although burnout contributes to increasing turnover intention, flexible working arrangements can lessen or inhibit turnover intention. To test for normality of data, I plotted residuals to check for multicollinearity and found no signs of multicollinearity. In addition, all the VIF values were below 10, which indicated the absence of multicollinearity. I rejected the null hypothesis for RQ5. These findings also aligned with evidence presented in Chapter 2 regarding the role that autonomy, in particular, can play in reducing the negative impact of burnout. Employee empowerment can boost retention rates by improving workers' motivation and job satisfaction through giving them more autonomy within the workplace (Sergio & Rylova, 2018). Researchers have concluded that employee empowerment policies can increase organizational productivity (Ghosh, 2013) and improve job satisfaction (Ukil, 2016). Employee empowerment has been positively associated with lowered turnover rates within social science literature. Nursing-specific studies have evidenced similar findings.

Despite a general agreement within the human resources literature that employee empowerment and flexible working arrangements can influence turnover rates, these linkages have remained largely unexplored (Sergio & Rylova, 2018; Zhang et al., 2018). Findings from this study extend the small body of literature regarding flexible working arrangements and the moderating role of employee empowerment in reducing burnout. Giving employees more autonomy within the workplace can empower them to feel more motivated, valued, and committed to their work (Ghosh, 2013; Sergio & Rylova, 2018). There is also a small body of literature specific to the nursing industry regarding



empowerment and turnover intention. An empirical study of Korean nurses (Kwon & Kwon, 2019) included evidence that empowerment reduces turnover intention of nurses. The Korean study findings were different from the findings of the present study (RQ4 and RQ6), which highlights the need to explore reasons for such difference. In a study of federal employees, Kim and Fernandez (2017) found that employee empowerment reduced turnover intention, which indicates that differences may exist across careers.

The data provided support for the null hypothesis for RQ6, which stated that there was no significant interaction effect of employee empowerment between burnout and turnover intention. One of the reasons for the lack of an interaction effect is that I did not account for social factors in this study. Previous research demonstrated that social support and social interaction in the workplace could moderate the relationship between empowerment and burnout (Chen et al., 2020). As has been indicated, the COVID-19 pandemic has placed uncustomary strain on nurses and the hospitals in which they work. In addition, nurses have had to limit social contact with loved ones in their homes to protect their families from potential transmission. These study findings extend empirical evidence that isolation and the lack of an organizational support system can have negative effects on retention rates. In a study of doctoral students, Brown (2017) found a lack of interaction with colleagues and strong feelings of isolation as the reasons most cited for dropping out. Similar trends persist within the nursing sector. Huyghebaert et al. (2019) conducted a cross-sectional research study on the perceived influence of social isolation on nurse turnover and found that the more socially isolated nurses felt, the more

likely they were to leave their job. Results from this study add to existing knowledge by showing that further consideration of multiple factors is needed.

In summary, results from this study indicate that job-related stress has a complex relationship with burnout and turnover intention. Workers possessing a greater sense of empowerment and autonomy appeared more capable of coping with stress. Additional strategies such as social support and work-life balance are also important. One of the primary purposes for conducting this study was to determine whether employee empowerment and flexible working arrangements had a moderating influence on the linear relationship between job-related stress, burnout, and turnover intention in nurses, and the results from the study make a significant contribution to a growing body of research that aims to improve nurses' workplaces.

### **Limitations of the Study**

Although this study offers significant and new insight into the relationship between job-related stress, burnout, employee empowerment, and turnover intention, there were some limitations that warrant discussion. Many of these limitations were identified in Chapter 1. Each of these is discussed in this section, in addition to how they potentially influenced the study results. The first of these limitations was the nonexperimental design. The nonexperimental design was the most appropriate design because the experimental approach was unsuited to the variables under study. Ethical consideration would make an experimental design unfeasible. Setting up study controls would be impractical. The nonexperimental design has a weakness in that it can only establish correlation or association, not causality. This means that the relationships

between variables are not as strong as they otherwise would be (Morrison, 2017).

Nonexperimental research can highlight functional predictive relationships examined for underlying causality. The correlational nature of this study was determined to be the most appropriate for addressing the research questions.

Using data self-reported by participants always includes the possibility of bias or falsehood, which means the data are not perfectly reliable (Gravetter & Forzano, 2018). Capturing self-reported data ensures a lack of ambiguity. The anonymity of participants gives a sense of privacy and helps with candor. It was important that I evaluate the variables in this study using self-reported data because burnout, turnover intention, and other key factors are internal to individuals. It is not possible to observe or assess these variables from the outside. The design of the study ensured the data were as accurate as possible, including voluntary participation and anonymity for the participants.

The results obtained through the delimitations were drawn from the limited context of hospital nurses in Dallas, Texas. These limitations were appropriate for the reasons discussed, but because of them, the results may not be generalizable. The findings must be interpreted with some degree of caution.

### **Recommendations**

Based on the findings and limitations, several recommendations can be made for extending research. I recommend that researchers implement experimental designs to manipulate an independent variable (job-related stress or employee empowerment) to determine impacts on a dependent variable (e.g., burnout or turnover intention). Through experimental designs, researchers can gain a better understanding of how each of these

factors impacts nurses' burnout and intent to leave their job. It is recommended that future researchers use other measures of job-related stress, burnout, employee empowerment, and turnover intent beyond just self-reporting. Although self-report instruments are necessary for identifying participants' perceptions, they can also be unreliable. Combining such measurements with observations and measurement of actual behaviors can help provide more insight into how variables correspond to one another. Finally, I recommend measuring larger samples with nurses outside of the Dallas area to determine the generalizability of these findings. These findings offer insight into factors that relate to turnover intention in nurses in the Dallas area, but they may not be applicable to the values and beliefs of nurses in other regions of the United States or outside the country.

### **Implications**

Results from this study have several potential implications. These implications exist for theories of stress and burnout, nursing practice, and policy. These findings have social significance. I discuss each of these implications in this section.

Findings from this study have potential significance to advancing theory. Using social exchange theory in this study permitted me to assign values that I then used to evaluate the hypothesized relationships. There is evidence in studies to support the choice of theory for similar studies. Results from this study provide opportunities for extending work on other potential factors affecting turnover intention of nurses. This study illustrates directions for future research, such as testing the relationships between factors using the social exchange theory. The premise of the social exchange theory is the

reciprocity of actions between individuals, and it was appropriate to use as a basis for the study. Another benefit is that other scholarly work may incorporate the use of social exchange theory to test similar relationships, which can strengthen the theory by adding to the body of existing literature. Alternatively, new findings may reveal the limits of the theory. In terms of scholarly work, the study addresses the specific gap in the literature concerning the unknown effect of moderating factors on the relationship between burnout, job-related stress, and turnover intention (Onnis, 2017).

The moderated model used in this study was efficacious and would be suitable to use as a guide for future research that evaluates how flexible work arrangements and employee empowerment affect the relationship between burnout and job-related stress on turnover intention. Increasingly, workplace wellness issues have gained credence and focus on recent literature. Results from this study may have applications beyond the confines of the nursing profession as well and may help promote improved working environments in high-stress jobs.

Results from this study have the potential to facilitate advancements in health care practice, such as through improving well-being and quality of life in workers by providing them with greater empowerment and autonomy. Research outcomes may extend existing knowledge on factors that moderate relationships and lead to turnover intention among nurses. Giving managers tools for controlling nurse turnover has practical significance. The research gap arose from the work of several researchers that these results help to fill. For example, Onnis (2017) conducted a qualitative study to examine the effect of management practices on the sustainability of health care

institutions. The present study results supported preceding research that indicated ineffective management practices affect health care management, including retention. Onnis called for more research into the role of management practices on nurse retention.

The outcome of the present study outcome answers Onnis's (2017) call for research by considering flexible work arrangements as a moderator for predicting turnover intention. Whittaker et al. (2018) conducted a qualitative ethnographic study to explore the role of stress and burnout that lead to the turnover of many nurses. Their results highlighted the importance of burnout as a driver of nurse turnover. Hence, Whittaker et al. called for more research on factors that may minimize the effects of burnout. Brook et al. (2018) conducted a systematic review to examine the viable strategies to address the high turnover rate among nurses. The results of the data analysis revealed many strategies for reducing turnover. The results also revealed an ongoing need for more research into factors that protect against turnover. Results from this study address that call for research by considering flexible work arrangements as a protective factor. Practically speaking, the significance of this study derives from the potential utility of its results in reducing turnover intention.

Results from this study reveal that flexible work arrangements can decrease the likelihood of job-related stress and burnout that lead to turnover. Health care managers may apply this new knowledge to real-world nursing practice and hospital management. Such practically applicable results are necessary because hospitals show a persistent high turnover rate in the United States (Richardson, 2018). The year with the highest rate of attrition among hospital nurses was 2017 (Nursing Solutions, 2018). The high turnover

rate contributed to a shortfall of 1.1 million nurses (Bureau of Labor Statistics, 2017).

Developing effective retention strategies can help address this problem by stemming the loss of nurses, which removes some of the need to train and hire new nurses. In terms of costs, there is evidence that retaining nurses can result in significant cost savings to the hospitals for which they work.

In the midst of health care challenges such as the COVID-19 pandemic, health care systems already burdened by strain on resources can ill afford turnover. In an Australian study of primary care nurses, Zhao et al. (2018) indicated that costs of nurse personnel significantly exceeded those of other health care staff categories. Through the study, Zhao et al. revealed that, as turnover increased, so did health care costs. These results highlight the importance of managing the costs of health care through lower turnover. Falatah and Salem (2018) concluded that more research is needed to help curb nurse turnover costs in Saudi Arabia. The knowledge generated from this study may lead to new strategies that health care managers can put into practice.

### **Implications for Social Change**

Results from this study may contribute to positive social change. For example, the COVID-19 pandemic has demonstrated that communities can be affected by inadequate nursing services. Communities, especially the older, the sick, and the young, may be affected most in such events. The availability of trained, empowered nurses is important to society, and nursing in society is significant to social change. Results from this study help answer for more research by addressing flexible work options and employee empowerment as potential moderating variables. Given the importance of nurses to the

medical profession and to society, this study also has significance for positive social change.

The results of the study may help address the nurse shortage caused by turnover. The results of the present study helped show that flexible work arrangements are a solution and confirmed that burnout and job-related stress are strong drivers of turnover intention among hospital nurses. Managers and administrators can better respond to challenges faced by nurses through improved understanding of the factors contributing to turnover. This, in turn, helps to build the body of managerial knowledge necessary to protect against the social consequences caused by a worsening nurse shortage. Societies depend on the health care services within their communities, and stable and healthy work environments create conditions for satisfied and committed employees and stable working communities. The aging of the U.S. population means that medical services will become increasingly necessary (Rowe et al., 2016). More specifically, Dallas, Texas, has a growing aging population (Lueckemeyer, 2020). It is important to society that a stable nursing workforce exists to meet the challenges of new diseases and pandemics. Such pandemics may place unusual demands on hospitals' ability to provide adequate caregiving.

Using social exchange theory (Emerson, 1976) provided an important framework for testing possible relationships between the variables in this present study. Researchers strengthen existing theory when applying such theory in their research. An evaluation of the strength of the theory as used in the study was completed in the Data Analysis and Study Results sections of Chapter 4, and the findings add to the existing body of



knowledge regarding the efficacy of the social exchange theory (Emerson, 1976). In essence, testing relationships helps to strengthen the theory or to challenge it in new ways.

### **Conclusion**

The purpose of this quantitative nonexperimental regression and moderation study was to examine the relationship between job-related stress and burnout and the dependent variable turnover intention and to determine if flexible work arrangements and employee empowerment moderate this relationship. Results demonstrated that job-related stress is associated with burnout, although this relationship appears to be moderated by several factors, including empowerment and autonomy. The numerous contributions of the results of this study were discussed in part in terms of the advances that can be made in the practice of health care services. Fortunately, the subject of nurse turnover has received much attention in scholarly publications.

Scholars and practitioners share similar interests regarding nurse turnover for a number of reasons. The first reason is the disruption to services and inconvenience to patients when nursing staffing levels decrease. The second reason is the financial strain caused by hiring new nurses to replace those lost through turnover. Previous research has shown that the cost of replacing a nurse is greater than that of hiring. Although not the sole focus of the study, health care managers also face stress resulting from constantly having to replace lost human resources. It makes sense to expect health care managers to cooperate with scholars in applying new knowledge to solve problems related to high rates of turnover among nurses. From a practical viewpoint, health care managers can

benefit from such knowledge. When health care managers find strategies, they can implement to lower turnover, they may be willing to collaborate in research concerning those strategies. Support exists in recent studies in which researchers proposed models for increasing collaboration between scholars and practitioners, as practitioners can supply valuable feedback for extending research. This concludes Chapter 5 and the study.

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## Appendix A: Menon Employee Empowerment Scale

15 item, six-point Likert-Type Scale.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Mildly Disagree	Mildly Agree	Moderately Agree	Strongly Agree

- \_\_\_ 1. I can influence the way work is done in my department.
- \_\_\_ 2. I can influence decisions taken in my department.<sup>2</sup>
- \_\_\_ 3. I have the authority to take decisions at work.<sup>2</sup>
- \_\_\_ 4. I have the authority to work effectively. \*
- \_\_\_ 5. Important responsibilities are part of my job. \*
- \_\_\_ 6. I have the capabilities required to do my job well.
- \_\_\_ 7. I have the skills and abilities to do my job well.
- \_\_\_ 8. I have the competence to work effectively.
- \_\_\_ 9. I can handle the challenges I face at work. \*
- \_\_\_ 10. I can do my work efficiently. \*
- \_\_\_ 11. I am inspired by what we are trying to achieve as an organization.
- \_\_\_ 12. I am inspired by the goals of the organization.
- \_\_\_ 13. I am enthusiastic about working toward the organization's objectives.
- \_\_\_ 14. I am enthusiastic about the contribution my work makes to the organization. \*
- \_\_\_ 15. I am keen on our doing well as an organization. \*

## Appendix B: Turnover Intention Scale

1	How often have you considered leaving your job?	Never	1—2—3—4—5	Always
3	How satisfying is your job in fulfilling your personal needs?	Very satisfying	1—2—3—4—5	Totally dissatisfying
4	How often are you frustrated when not given the opportunity at work to achieve your personal work-related goals?	Never	1—2—3—4—5	Always
6	How often do you dream about getting another job that will better suit your personal needs?	Never	1—2—3—4—5	Always
7	How likely are you to accept another job at the same compensation level should it be offered to you?	Highly unlikely	1—2—3—4—5	Highly likely
8	How often do you look forward to another day at work?	Always	1—2—3—4—5	Never

## Appendix C: Flexibility of Work Scale

Three item, five-point Likert-Type scale. (from 1 = *strongly disagree* to 5 = *strongly agree*) 3-items

- \_\_\_ 1. My supervisor considers my personal needs when making my work schedule.
- \_\_\_ 2. At my request, my supervisor has accommodated my off-the-job demands when assigning my work hours.
- \_\_\_ 3. Outside of formal leave and sick time, my supervisor has allowed me to take time off to attend to non-work-related issues.

## Appendix D: Maslach Burnout Inventory Scale

## 7-Point Likert-Type Scale.

Participants responded using a seven-point Likert scale: (1 = never; 7 = always)

- \_\_\_ 1. I feel emotionally drained from work
- \_\_\_ 2. I feel used up at the end of the workday
- \_\_\_ 3. I feel tired when I get up in the morning and have to face another day
- \_\_\_ 4. Working all day is really a strain for me
- \_\_\_ 5. I can effectively solve the problems that arise in my work.
- \_\_\_ 6. I feel burned out from my work
- \_\_\_ 7. I am making an effective contribution to what this organization does
- \_\_\_ 8. I have become less interested in my work since I started the job
- \_\_\_ 9. I have become less enthusiastic about my work.
- \_\_\_ 10. In my opinion, I am good at my job
- \_\_\_ 11. I feel exhilarated when I accomplish something at my job
- \_\_\_ 12. I have accomplished many worthwhile things in this job
- \_\_\_ 13. I just want to do my job and not be bothered
- \_\_\_ 14. I have become cynical about whether my work contributes anything
- \_\_\_ 15. I doubt the significance of my work
- \_\_\_ 16. At my work I feel confident that I am effective at getting things done



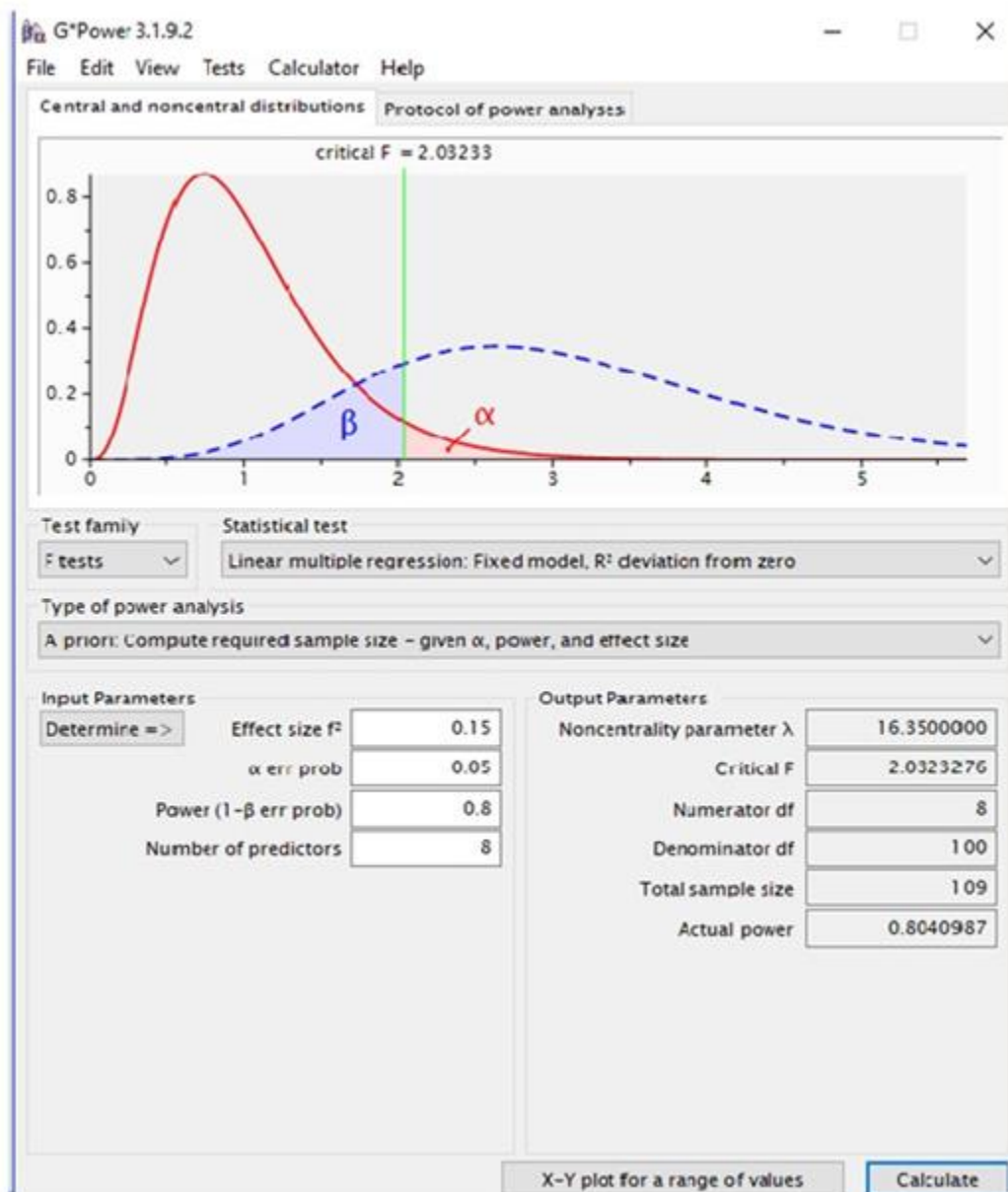
## Appendix E: Job Related Stress Scale

## 13 item 6- point Likert-Type Scale

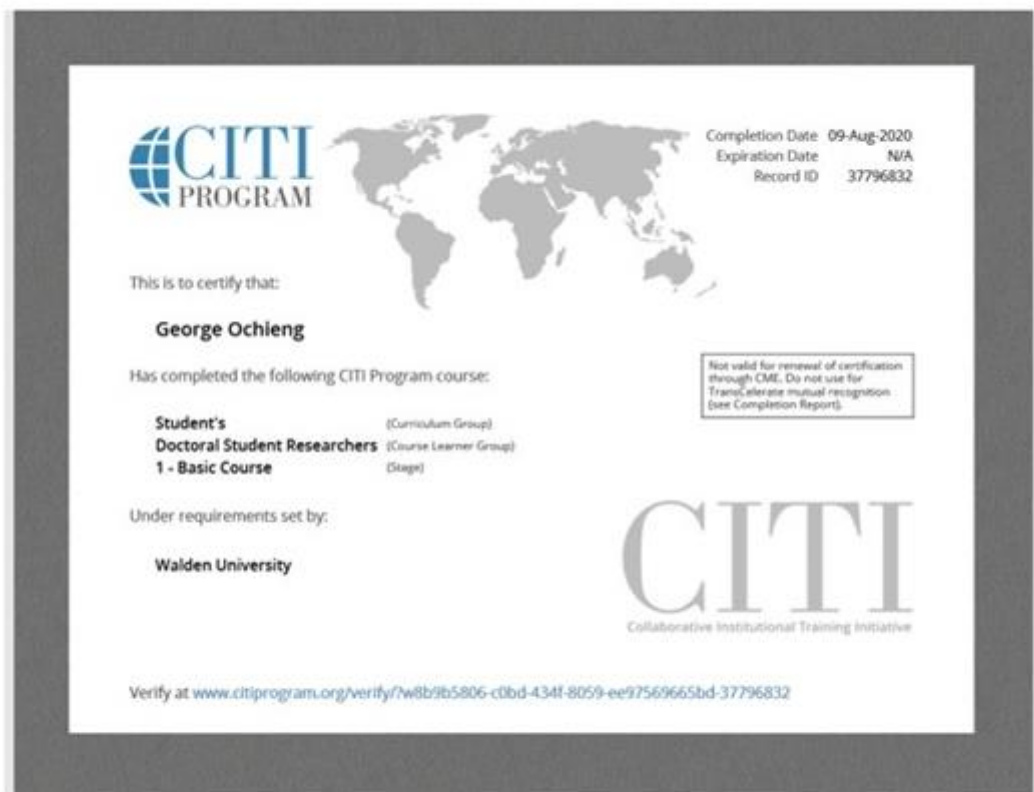
(Strongly disagree, disagree, neutral, agree, and strongly agree)

- \_\_\_ 1. Item I have felt fidgety or nervous as a result of my job
- \_\_\_ 2. Working here makes it hard to spend enough time with my family
- \_\_\_ 3. My job gets to me more than it should
- \_\_\_ 4. I spend so much time at work, I can't see the forest for the trees
- \_\_\_ 5. There are lots of times when my job drives me right up the wall
- \_\_\_ 6. Working here leaves little time for other activities
- \_\_\_ 7. Sometimes when I think about my job, I get a tight feeling in my chest
- \_\_\_ 8. I frequently get the feeling I am married to the company
- \_\_\_ 9. I have too much work and too little time to do it in
- \_\_\_ 10. I feel guilty when I take time off from job.
- \_\_\_ 11. I sometimes dread the telephone ringing at home because  
the call might be job-related
- \_\_\_ 12. I feel like I never have a day off
- \_\_\_ 13. Too many people at my level in the company get burned

## Appendix F: G\*Power Analysis



## Appendix G: Human Subject Certification



## Appendix H: Permission to Use Menon Empowerment Scale

**TITLE OF INSTRUMENT:** Menon Empowerment Scale

---

**AUTHOR (S):** Sanjay T. Menon

**PURPOSE:** The Menon Empowerment Scale measures the psychological dimensions of employee empowerment.

**PRIMARY REFERENCE:**

- Menon, S. T. (2001). Employee empowerment: An integrative, psychological approach. *Applied Psychology: An International Review*, 50, 153-180.

**AVAILABILITY:** The Menon Empowerment Scale is protected by copyright and does not require permission to use or reprint. There is no fee for non-commercial use. Authors are asked to cite the primary reference above. Information on the Menon Empowerment Questionnaire can be obtained by contacting Dr. Sanjay T. Menon, Director, Management/Marketing Department, Business and Education Bldg 316. LSUS, One University Place, Shreveport, LA 71115 or [sanjay.menon@lsus.edu](mailto:sanjay.menon@lsus.edu)

## Appendix I: Permission to Use Turnover Intention Scale

George Ochieng,

On behalf of Prof Gert Roodt:

You are welcome to use the TISI

For this purpose please find attached the longer 15-item version of the scale. The six items used for the TIS-6 are high-lighted. You may use any one of these two versions.

You are welcome to translate the scale if the need arises. I would like to propose the translate – back-translate method by using two different translators. First you translate from English into home language and then back from home language to English to see if you get to the original English wording.

This is the fourth version of the scale and it is no longer required to reverse score any items. The total score can be calculated by merely adding the individual item scores. I would strongly recommend that you also conduct a CFA on the item scores to determine which item scores should be reflected.

The only conditions for using the TIS is that you acknowledge authorship (Roodt, 2004) by conventional academic referencing. The TIS may not be used for commercial purposes.

I wish you the very best with your research project!

Regards

FC Bothma

Turnover intentions questionnaire - v4.doc

## Appendix J: Permission to Use Flexible Work Arrangement Scale

Dear Dr. Rousseau

I was drawn by your study instrument and its fitness for my current dissertation endeavor. I am a Ph.D. student at Walden University. My dissertation research topic is on the moderating effect of employee empowerment and flexible work arrangements on the relationship between burnout and the turnover intention of nurses. I would like to use your questionnaire (the three-part portion Schedule Flexibility i-deals) because it is most suitable measure of flexible work arrangement variable with excellent reliability and validity numbers. If you do not entirely control the copyright on the instrument, I would like to request the contact information of the other party(s) as well. This is a non-commercial study and is for the purpose of fulfilling my degree award. My IRB contact info is [irb@mail.waldenu.edu](mailto:irb@mail.waldenu.edu). I look forward to your earliest most convenient reply. Please do not hesitate to contact me for additional information.

Sincerely

George Ochieng

Student Walden University

[George.ochieng@waldenu.edu](mailto:George.ochieng@waldenu.edu)

**Denise M. Rousseau** to you

Aug 17, 2020

Great just cite our study no permission needed otherwise. Good luck with your work.

## Appendix K: Permission to Use Maslach Burnout Inventory

**Permission for George Ochieng to reproduce 1 copy  
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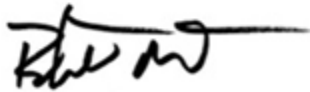
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Sincerely,



Robert Most  
Mind Garden, Inc.  
[www.mindgarden.com](http://www.mindgarden.com)

## Appendix L: Permission to Use Job Related Stress Scale

Dear Dr DeCotiis

I was drawn by your study instrument and its fitness for my current dissertation endeavor. I am a Ph.D. student at Walden University. My dissertation research topic is on the effect of job-related stress and burnout on the turnover intention of nurses. I would like to use your questionnaire Job-Related Stress (JRS) scale because it is the most appropriate in terms of the variable reliability and validity numbers. The research is potentially exciting considering the times we are in with rising pandemics and an increasing aging population. This is a non-commercial study and is for the purpose of fulfilling my degree award. I look forward to your earliest most convenient reply.

Sincerely

George Ochieng

George.ochieng@waldenu.edu

**Tom DeCotiis** to you

Jul 29, 2020

George,

You are welcome to use the scale. Lot's of luck with your research.

Tom



## Appendix M: Summary of Null Hypothesis Outcomes

Hypothesis	Outcome
<i>H<sub>0</sub>1</i> : The level of job-related stress is not a statistically significant predictor of the turnover intention of nurses.	Rejected
<i>H<sub>0</sub>2</i> : The level of burnout is not a statistically significant predictor of the turnover intention of nurses.	Rejected
<i>H<sub>0</sub>3</i> : Flexible working environment does not moderate the relationship between job-related stress and the turnover intention of nurses.	Rejected
<i>H<sub>0</sub>4</i> : Employee empowerment does not moderate the relationship between job-related stress and the turnover intention of nurses.	Fail to reject
<i>H<sub>0</sub>5</i> : Flexible working arrangement does not moderate the relationship between burnout and the turnover intention of nurses.	Rejected
<i>H<sub>0</sub>6</i> : Employee empowerment does not moderate the relationship between burnout and the turnover intention of nurses.	Fail to reject

## Appendix N: Survey Questions Ratings Key

**Age**1=*18-25*2=*26-32*3=*33-39*4=*40-46*5=*47-53*6=*Above 53***Gender**1=*Female*2=*Male*3=*Chose not to identify***How many years have you worked as a hospital nurse?**1=*More than 1 year*2=*2-5 years*3=*6-9 years*4=*Less than 1 year***Job-Related Stress**1=*Strongly disagree*2=*Disagree*3=*Neutral*4=*Agree*5=*Strongly agree***Maslach Burnout Scale**1=*Never (Never)*2=*Rarely (a few times a year)*3=*Sometimes (once a month or less)*4=*Dont know (a few times a month)*5=*Missing (once a week)*6=*Ocassionaly (a few times a week)*7=*Often (every day)***Flexible Working Arrangements**1=*Strongly disagree*2=*Disagree*3=*Neutral*4=*Agree*5=*Strongly agree***Turnover Intention Scale**1=*Never*2=*Rarely*3=*Sometimes*4=*Ocassionaly*5=*Always***Menon Employee Empowerment Scale**1=*Strongly disagree*2=*Moderatley disagree*3=*Mildly disagree*4=*Mildly agree*5=*Moderately agree*

## Appendix O: Residual Statistics Job-Related Stress and Flexible Work Arrangements

## Predicting Turnover Intention

	Minimum	Maximum	Mean	Std. Deviation	<i>N</i>
Predicted Value	1.4189	4.0264	2.9756	.44271	116
Residual	-1.48606	1.97560	.00000	.64551	116
Std. Predicted Value	-3.516	2.374	.000	1.000	116
Std. Residual	-2.282	3.034	.000	.991	116

a. Dependent Variable: TISMean

## Appendix P: Collinearity Diagnostics Job-Related Stress and Flexible Work

## Arrangements Predicting Turnover Intention

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	JRSMean	FWAMean
1	1	2.928	1.000	.00	.00	.01
	2	.059	7.032	.00	.26	.57
	3	.013	14.842	.99	.73	.42

a. Dependent Variable: TISMean

## Appendix Q: Residual Statistics Job-Related Stress and Employee Empowerment

## Predicting Turnover Intention

	Minimum	Maximum	Mean	Std. Deviation	<i>N</i>
Predicted Value	1.2626	3.7689	2.9756	.42558	116
Residual	-1.62932	1.64009	.00000	.65694	116
Std. Predicted Value	-4.025	1.864	.000	1.000	116
Std. Residual	-2.459	2.475	.000	.991	116

a. Dependent Variable: TISMean

## Appendix R: Collinearity Diagnostics Job-Related Stress and Employee Empowerment

## Predicting Turnover Intention

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	JRSMean	MEESMean
1	1	2.955	1.000	.00	.00	.00
	2	.032	9.554	.01	.68	.40
	3	.012	15.398	.99	.32	.60

a. Dependent Variable: TISMean

## Appendix S: Residual Statistics Burnout and Flexible Work Arrangements Predicting

## Turnover Intention

	Minimum	Maximum	Mean	Std. Deviation	<i>N</i>
Predicted Value	1.5295	3.9499	2.9538	.45765	119
Residual	-1.61395	1.29323	.00000	.64369	119
Std. Predicted Value	-3.112	2.177	.000	1.000	119
Std. Residual	-2.486	1.992	.000	.991	119

a. Dependent Variable: TISMean

## Appendix T: Collinearity Diagnostics Burnout and Flexible Work Arrangements

## Predicting Turnover Intention

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	MBIMean	FWAMean
1	1	2.918	1.000	.00	.01	.01
	2	.065	6.692	.00	.37	.49
	3	.017	13.201	1.00	.62	.51

a. Dependent Variable: TISMean



## Appendix U: Residual Statistics Burnout and Employee Empowerment Predicting

## Turnover Intention

	Minimum	Maximum	Mean	Std. Deviation	<i>N</i>
Predicted Value	1.9151	3.7417	2.9538	.40890	119
Residual	-1.75504	1.42061	.00000	.67571	119
Std. Predicted Value	-2.540	1.927	.000	1.000	119
Std. Residual	-2.575	2.085	.000	.991	119

a. Dependent Variable: TISMean

## Appendix V: Collinearity Diagnostics Burnout and Employee Empowerment Predicting

## Turnover Intention

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	MBIMean	MEESMean
1	1	2.974	1.000	.00	.01	.00
	2	.058	7.119	.00	.45	.19
	3	.008	18.736	1.00	.54	.80

a. Dependent Variable: TISMean