Work and Family Conflict: A Comparative Analysis Among Staff Nurses, Nurse Managers, and Nurse Executives

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WORK AND FAMILY CONFLICT: A COMPARATIVE ANALYSIS AMONG STAFF NURSES, NURSE MANAGERS, AND NURSE EXECUTIVES

by

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A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Department of Public Affairs in the College of Health and Public Affairs at the University of Central Florida Orlando, Florida

Spring Term
2018

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ABSTRACT

The nursing workforce increasingly faces issues that affect clinical and managerial practice. One such issue is work-family conflict (WFC) and family-work conflict (FWC). Nurses face role strain as they confront the pressures from often competing work-and-family roles. This study assessed WFC/FWC among varying nurse roles: staff nurses, managerial nurses, and nurse executives. A random sample of 5,000 nurses, generated from registered nurses practicing in the state of Florida, was surveyed for this research study. Nurses were surveyed on demographics, perceptions regarding the work environment, and perceptions of WFC/FWC.

Descriptively, nurses experienced more work-family conflict than family-work conflict. Regression analyses and ANOVAs indicated that staff nurses experienced less work-family conflict than nursing managers (second most) and nursing executives (highest). None of the nurse roles experienced significant levels of FWC. White nurses, compared to non-white nurses, experienced less WFC and FWC. WFC increased with shift length but FWC was not significantly affected by it. Paid leave for childbirth was associated with lower FWC.

This study holds significant implication for the nursing workforce. Nurse managers and executives showed significantly higher WFC than staff nurses. This may discourage a nurse from taking on leadership roles or lead to leaving them. In an era where nurse managers and leaders are needed, efforts must be taken to decrease WFC/FWC factors. Nonwhite nurses reported higher levels of both WFC and FWC. This may contribute to tension at the workplace and a difficult family life. Leaders must continue to create platforms for nurses of all races and ethnicities to voice their work and family needs, and to be supported when doing so. Nurses
working shifts over 8 hours had higher WFC levels. Although 12-hour shifts have been popular among staff and management, their use should be reevaluated. Finally, paid leave for childbirth is a program worth supporting, as it was a factor in lower FWC.
This is dedicated to my boys, Jimmy and Luke. All the work I do, I do for you.
ACKNOWLEDGMENTS

To Dr. Lynn Unruh: Thank you for taking on the task of chairing my dissertation. I am grateful for your guidance, time, expertise, and never-ending patience during my dissertation process. Without you, I would not be where I am today. I am forever grateful.

To Dr. Xinliang Liu: Thank you for your statistical expertise during this process. I appreciate your helpful and timely feedback every step of the way. Thank you for all that you do.

To Dr. Myron Fottler: Thank you for walking with me through much of my academic career—both as a student and now, as a faculty member. You have encouraged me for over a decade and I am so very grateful.

To Dr. Diane Andrews: Thank you for all of your incredible feedback during this process. Thank you for your patience as I worked through so much while completing this dissertation. I am forever grateful for your guidance and influence.

To Dr. Roy Lukman: Thank you for the chocolate and all the support behind the scenes. You have cheered me on every step of the way.

To my mom, Diane: Thank you for all of your support and encouragement along the way. Thank you for the food, prayers, babysitting, and laundry help. I would not have been able to complete this dissertation (or make it through alive) without your unending support. I think you deserve an honorary degree!

To Tina Yeung and Rachel Mustonen: I could not have completed this journey without you both. I am so grateful for our time together as doctoral students, but more grateful for the
incredible friendships that we formed during this time. I am honored to walk with you both through this life.

And to all of my family members and friends: Thank you. It takes a village. I am glad you are my village!
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CHAPTER ONE: INTRODUCTION

Background

The nursing profession comprises over 3 million professionals, and it currently stands as the largest workforce segment in the U.S. health care system (BLS, 2015; Hooper, 2011). Within the nursing profession, over 2.7 million nurses are registered as registered nurses, or RNs (BLS, 2015). Traditionally, RNs practice at the bedside and are responsible for providing crucial, front-line patient care. However, RNs can also practice in other roles, or as nursing managers of varying levels. The most predominant practice settings for registered nurses include hospitals, skilled nursing faculties, home health agencies, public health facilities, and hospice care setting (FCN, 2016b).

According to a 2008 national survey of registered nurses (the last year of this three-decade-long survey project), over 66% of nurses practiced as front line staff nurses, whereas 12.5% practiced as nurse managers of various ranks (HRSA, 2010). Other nurses practiced in the following capacities: patient coordinator (5%), nurse practitioner (4%), nurse anesthetist (1%), nursing faculty (4%), and nurse specialist, midwife, consultant, or researcher (all under 1% respectively) (HRSA, 2010).

Despite large numbers of registered nurses, the nursing population increasingly faces issues that impede its clinical and managerial practice. Even considering the ebb and flow to the supply of nurses, experts still project a long-term shortage: “Projections indicate there will be a deficit of more than 260,000 nurses by 2025” (AACN, 2016). The shortage has a number of
causes. On the demand side, a large group of citizens are entering old age, and a growing number of individuals with health insurance due to the ACA increases the demands for health care. On the supply side, a large cohort of nurses is retiring, too few nurses are entering the profession, and others are leaving nursing prior to retirement age (HRSA, 2010, 2016).

Further, the nursing profession is wrought with organizational turnover, dissatisfaction and low morale (Baernholdt & Mark, 2009; Byrne, 2006; Teo, Pick, Newton, Yeung, & Chang, 2013). Nursing turnover and vacancies have created a current shortage of over 12,000 nurses in the state of Florida (McGrory, 2016). These unfilled RN positions create spillover effects, impacting patients, hospitals, and the community at large.

Many work-related issues have been identified as related to organizational and professional dissatisfaction as well as leaving the profession. These include workload, job demands and pressures, scheduling, shift work, and other characteristics of the nursing work environment (Leineweber, Chungkham, Westerlund, Tishelman, & Lindquist, 2013; van Bogaert, Clarke, Roelant, Meulemans, & Van de Heyning, 2010). Another important issue that has been shown to affect staff nurses is the degree of perceived work and family conflict (Grzywacz, Frone, Brewer, & Kovner, 2006; Unruh, et. al, 2016; Yildirim & Aycan, 2008).

Work-family and family-work conflict issues relate to the often-conflicting roles nurses hold within their workplace and their families (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005). This work and family conflict is an “inter-role conflict” in which role pressures from the work and family domains are mutually incompatible, to varying degrees (Fujimoto, Kotani, & Suzuki, 2008; Greenhaus & Beutell, 1985; Yildirim & Aycan, 2008). Nurses frequently find themselves caught between the demands of their work and their family. This imbalance confronted by nurses often results in negative organizational and psychological outcomes that
prove unfavorable to nurses, the organizations in which they practice, their patients, and the profession at large (Camerino et al., 2010; Cortese, Colombo & Ghislieri, 2010; Fujimoto et al., 2008; Leineweber et al., 2013; Shacklock & Brunetto, 2011; Unruh et. al., 2016).

While a number of studies have explored both the predictors and the impacts of work and family conflict among staff nurses, none have studied this in comparison to nurse managers or nurse executives. Nurse managers can be classified as holding varying levels or responsibility. For this study, direct care nurse managers and nurse executives will be explored alongside staff nurses. A registered nurse direct care manager is one who has direct authority and 24-hour responsibility for one or more inpatient units to include fiscal, operational, and accountability for performance outcomes for clinical nurses and other health care workers who directly report to them; in this role, nurses fill a managerial position and balance the management of nursing staff with clinical practice (Cziraki, McKey, Peachey, Baxter, & Flaherty, 2014; Shirey, McDaniel, Ebright, Fisher, & Dobbeling, 2010). In contrast, a registered nurse who is filling a leadership role (often Chief Nursing Officer or the like) is responsible for aligning multidisciplinary care teams around an organization’s mission and vision while maintaining cost effectiveness of care; nurse executives advance the clinical agenda of the profession while pursuing best practices and patient-centered values across the continuum (Larson, 2017).

Regardless of rank, the nurse manager and nurse executive roles are critical ones in health care settings as they link clinical practice RNs and administration in an effort to provide guidance and support to clinical staff (Cziraki et al., 2014). Those in management or executive positions are not without challenge; those who fill these roles often juggle increased demands and responsibilities related to human resources, financial analysis, information technology, and risk/quality management (Gould, Kelly, & Maidwell, 2001). This study will explore work and
family conflict among two levels of nurse managers—direct care nurse managers and nurse administrator/executives, in contrast to staff registered nurses—who practice in the state of Florida.

Nursing Practice in the State of Florida

Nursing practice in the state of Florida is especially meaningful to study due to its particular population dynamic. As baby boomers (i.e., those born between 1946 and 1964) retire, they will likely strain the health care system with increased demand for care, especially in the state of Florida, which attracts many retirees.

Workforce experts question whether the supply of RNs in Florida will be sufficient to meet this growing demand. There are an estimated 193,025 working RNs in Florida, 67.8% of whom are staff nurses and 8.4% of whom are nurse managers of varying levels (FCN, 2016c). As 17% of Florida RNs are over age 61 and 27% are ages 51-60, a large group of the Florida RN population is expected to leave active practice within the next 5-10 years due to age (FCN, 2016c). Further, turnover, separations, and vacancies are all growing issues that plague the Florida state nursing population (FCN, 2016a, 2016b.) The projected shortage of staff and manager/executive RNs in the state of Florida indicates the need to identify issues that affect leaving versus staying in nursing and the job, especially among nurse managers/executives, about which less is known.

Impact of Work and Family Conflict on Nurses, Nurse Managers, and Nurse Administrators/Executives

Work and family conflict is a significant issue in the nursing profession. Studies have linked high levels of work and family conflict with low levels of job satisfaction (Cortese et al., 2010), and low levels of job satisfaction are linked to turnover (Eby et al., 2005). Additionally,
work and family conflict has been cited as one of the best predictors of nurse burnout (Leineweber et al., 2013). Burnout on the job has multiple negative impacts on nurses and the nursing profession at large including increased stress, increased work conflict, decreased occupational health, increased intention to leave, and increased turnover (Pal, 2012). Lastly, high levels of work and family conflict are found to influence a nurse’s intention to leave the profession altogether (Shacklock & Brunetto, 2011).

It remains important to study the issue of work and family conflict among nurses, especially nurses who have not been studied for this sole purpose (i.e., direct care registered nurse managers and nurse administrators/executives). Whether work and family conflict is an issue among nurse managers and nurse executives is a question that needs addressing in order to better understand this population and retain them in their profession and roles in the state of Florida. If it is an issue, it would be important to identify factors that could be changed that would make it less of an issue.

A nurse’s intention to leave the job or the nursing profession entirely is regarded as a “withdrawal process” from the workforce (Morrell, 2005). Previous studies have concluded that intention to leave is significantly associated with burnout and increased feelings of work family conflict (Chiang & Chang, 2012; Simon, Kümmerling & Hasselhorn, 2004). As such, it is important to understand and assess intent to leave in order to prevent turnover because this intention most significantly predicts a nurse’s decision to leave the workplace or profession altogether (Hayes et al., 2006; Krausz, Koslowsky, Shalom, & Elyakim, 1995). As one way to decrease turnover, nurse leaders should be mindful of staff who are experiencing burnout as a result of work and family conflict.
Coupled with the dynamic of work and family conflict within the nursing profession is the fact that nurse managers—both at the direct care and executive levels—are being called upon to “step up” and fill leadership roles. However, there is a disconnect between the need for nurses to step up and those who are academically trained to do so. Currently, the demand for advanced trained nurses (i.e., those who hold a masters or doctoral degree) far outweighs the supply (AACN, 2016).

The Institute of Medicine (IOM) published a report in 2010 regarding the future status of the nursing profession. Within the report, multiple recommendations were provided, designed to overcome education, practice, and workforce barriers felt within the nursing profession (IOM, 2010). Key messages from this report were numerous, and a few focused specifically on the development of nurse leadership:

*Recommendation 1:* Nurses should practice to the full extent of their education and training;

*Recommendation 2:* Nurses should achieve higher levels of education and training through an improved education system that promotes seamless academic progression;

*Recommendation 3:* Nurses should pursue full partnership status with physicians and other health care professionals.

These recommendations hold a large implication for the nursing profession, especially as it relates to work and family conflict. If work and family conflict levels are high, nurses are unlikely to pursue greater managerial responsibilities (Sherman & Pross, 2010). As such, it is important to continue to assess family and work domains and the impact they have on the nursing managers—of all levels—and the overall future profession of nurses.
Significance and Contribution of Study

Previous studies of work and family conflict in nursing have mostly examined the conflict felt among nurses who practice in other countries (Estryn-Béhar & van der Heijden, 2012; Farhadi, Sharifian, Feili, & Shokrpour, 2013; Leineweber et al., 2013; Lembrechts, Dekocker, Zanoni, & Pulignano, 2015; Pal, 2012; Simon et al., 2004; Takeuchi & Yamazaki, 2010; Wang & Tsai, 2014; Yildrim & Aycan, 2008), or have addressed predictors and outcomes of work and family conflict among only hospital staff nurses specifically (Camerino et al., 2010; Cortese et al., 2010; Fujimoto et al., 2008; Shacklock & Brunetto, 2011). Only a handful of studies have addressed work and family conflict in the United States (Gipson-Jones, 2009; Grzywacz et al., 2006; Lawrence, Halbesleben, & Paustian-Underdahl, 2013; Unruh et al., 2016). In the state of Florida, the only known study on work and family conflict among nurses sampled only newly licensed nurses (Unruh et al., 2016).

This study aims to fill a gap in the literature by assessing work and family conflict dynamics among a sample of staff nurses as well as RNs who practice as direct care nurse managers and nurse administrators/executives. This study will 1) describe the extent to which differing nurse roles—staff nurses, direct care managers, and nurse administrators/executives—experience work and family conflict; 2) compare the perceptions of work and family conflict of managers of varying levels with those of staff nurses; and 3) explore personal and work environment factors that contribute to work and family conflict among nurse manager/executive roles. Previously, no research has been conducted that addresses these issues.

This study will improve our knowledge about the state of Florida nursing workforce (which has also not been studied extensively) by understanding conflicts within the nursing profession specific to those who practice in the state of Florida. The study will also make a
significant contribution to the nursing workforce literature and conclude with essential policy implications given the study findings.

**Purpose of Study**

The first purpose of this study is to describe the perceptions of staff registered nurses, direct care registered nurse managers, and nurse executives in the state of Florida concerning work and family conflict. As of 2013, few studies have empirically examined nurse managers’ stressors, and none has addressed work and family conflict among nurse managers of varying levels (Kath, Stichler, Ehrhart, & Sievers, 2013).

The second purpose is to assess whether there is a difference in perceptions of work-family/family-work conflict between staff nurses, direct care nurse managers, and nurse executives. Practitioner responsibilities in these three roles differ, so much so that nurses may refuse to enter into management positions in order to decrease work and family conflict impacts. The third purpose is to assess personal and work environment factors that contribute to perceptions of work and family conflict among varying nurse roles.

**Definitions of Terms**

Table 1 lists important terms and definitions for the purpose of this study.
<table>
<thead>
<tr>
<th>Term/Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Care Registered Nurse</td>
<td>A registered nurse who is responsible for providing front-line patient care that can be delivered within multiple settings (FCN, 2016b)</td>
</tr>
<tr>
<td>Direct Care Nurse Manager</td>
<td>A registered nurse who has direct authority and 24-hour responsibility for one or more inpatient units to include fiscal, operational, and accountability for performance outcomes for clinical nurses and other health care workers who directly report to them. In this role, nurses fill a head-nurse or managerial position and balance the management of nursing staff with clinical practice (Shirey 2010; Cziraki et al, 2014)</td>
</tr>
<tr>
<td>Nurse Administrator/Executive</td>
<td>A registered nurse who is filling a leadership role (often Chief Nursing Officer or the like) responsible for aligning multidisciplinary care teams around mission and vision while maintaining cost effectiveness of care; nurse executives advance the clinical agenda of the profession while pursuing best practices and patient-centered values across the continuum (Larson, 2017)</td>
</tr>
<tr>
<td>Family</td>
<td>A close group of people related by blood, mating, or legalities (Orr, 2017)</td>
</tr>
<tr>
<td>Work and Family Conflict</td>
<td>A bi-directional relationship in that family can interfere with work and work can interfere with family (Pal, 2012)</td>
</tr>
<tr>
<td>Work-family Conflict or WFC</td>
<td>A form of interrole conflict in which the general demands of, time devoted to, and strain created by the job interfere with performing family-related responsibilities (Farhadi et al., 2013)</td>
</tr>
<tr>
<td>Family-work Conflict or FWC</td>
<td>A form of interrole conflict in which the general demands of, time devoted to, and strain created by the family interfere with performing work-related responsibilities (Farhadi et al., 2013)</td>
</tr>
</tbody>
</table>

Table 1. Definitions of Terms
Chapter Summary

This chapter explored the nursing profession and subsequent issues felt by the profession, including work-and-family conflict. Work-and-family conflict was defined, and a background of this construct was provided, specifically related to nursing leaders. The purpose and significance of the study were defined to set the tone for the literature review, covered in the next chapter.
CHAPTER TWO: LITERATURE REVIEW

Introduction

The purpose of this chapter is two-fold. First, a theoretical framework will be applied to the construct of work and family conflict. Specifically, role strain theory will be defined, and literature applying this theory will be reviewed. Second, this chapter will address a thorough overview of the literature related to work and family conflict within the nursing profession. This portion of the chapter will be divided into sections that review previous work and family conflict studies on nurses, including an overview of variables that are common to this particular study. Lastly, this literature review section will include a discussion on the many gaps in the literature that this study will address.

Theoretical Framework

The framework used to guide this study is the Role Strain theory. Role Strain theory (Coser, 1974; Edgell, 1970; Marks, 1977) focuses on the fundamental concepts of scarcity as it relates to time, energy, and commitment. Coser (1974) stated that people are expected to “play many roles on many stages” (p. 3) and as a result, divide up their energies accordingly. When individuals’ roles demand their entire time, the roles “devour the whole man” (p. 18). Role strain, or the difficulty in meeting specific role demands, results. Because individuals do not have enough energy for everyone and for all roles, compromises are made.

Edgell (1970) contributed to the theory by looking at conflicts between occupational roles and familial or marital roles. He contended that one “can be married to his work or his home and
family” and that he who tries to subscribe to both domains will be the “victim of role conflict” (p. 320). Commitment to one domain or role will always detract from another (Edgell, 1970).

In the field of nursing, role strain results as nurses manage scarce time and energy while meeting multiple commitments, both personally and professionally. Strain-based conflicts can occur when the “fulfillment of one role causes strain that spills over into the other” (Simon et al., 2004, p. 385), as in the case of both work and family.

Nurses, loyal to their patients, often put the needs of others before their own and, sometimes, their family’s needs (Mullen, 2016). Research on role-strain, specifically role conflict, contends that the tension between the work and family domains can contribute to stress (Kim, Baker, Spillers, & Wellisch, 2006) as well as decrease both physical and psychological well-being (Allen, Herst, Bruck, & Sutton, 2000; Frone, Russell, & Cooper, 1992; Frone, Yardley, & Markel, 1997; Thomas & Ganster, 1995). Figure 1 illustrates this concept in a theoretical model.

![Theoretical Model](image)

Figure 1. Theoretical Model
Additionally, nurses juggle multiple, competing demands that are “cognitively demanding, of a critical nature, or complex and multifaceted” (Cornell et al., 2010, p. 372). Takeuchi and Yamazaki (2010) confirmed this and opined that nursing is one of the most physically and psychologically demanding professions. Because of these occupational demands, the presence of role strain can increase exponentially and cause disruptions in work and family domains. When compromises are made while fulfilling the role of a nurse, disruptions in patient care and/or family well-being (and other adverse personal and professional outcomes) can occur.

The Role Strain theory will guide this research study as a way to understand the work and family conflict (i.e., strain) that arises as nurses perform multiple personal and professional roles.

**Work and Family Conflict Overview**

In the past, work and family domains were traditionally considered two separate paradigms (Pal, 2012). However, researchers now have a different understanding of the concepts: family and work can both interfere with and impact each other. The challenge for managers and executives across all industries and disciplines is how to strike a balance between these competing work and family demands (Farhadi et al., 2013).

Pal (2012) noted that work and family conflict is a bi-directional relationship in that family can interfere with work (family-to-work conflict, family-work conflict, or FWC) and work can interfere with family (work-to-family conflict, work-family conflict, or WFC). Specifically, work-to-family conflict is defined as “interrole conflict in which the general demands of, time devoted to, and strain created by the job interfere with performing family-related responsibilities” (Farhadi et al., 2013, p. 107). Conversely, family-to-work conflict is defined as “a form of interrole conflict in which the general demands of, time devoted to, and strain created by the family interfere with performing work-related responsibilities” (Farhadi et
al., 2013, p. 107). Takeuchi and Yamazaki (2010) further noted that both work and family responsibilities can be physically and psychologically demanding, thus increasing the conflict or strain between both domains.

Studies show that personal characteristics most consistently affect family-to-work conflict while work-setting characteristics most consistently affect work-to-family conflict (Burke & Greenglass, 1999, 2001; Unruh et al., 2016). Although work-family conflict and family-work conflict are not reciprocally related they are both involved in a number of relationships that result in intent to leave the job or the profession altogether (Unruh et al., 2016). The challenge remains to develop a broad understanding of what contributes to perceived conflict in each of these areas—family and work—in order to adequately support the nursing workforce for engagement and retention purposes.

Previous studies of work and family conflict in nursing have mostly examined the conflict felt among nurses who practice in other countries (Estryn-Behar & van der Heijden, 2012; Farhadi et al., 2013; Leineweber et al., 2013; Lembrechts et al., 2015; Pal, 2012; Simon et al., 2004; Takeuchi & Yamazaki, 2010; Wang & Tsai, 2014; Yildirim & Aycan, 2008), or have addressed predictors and outcomes of work and family conflict among only hospital staff nurses (Camerino et al., 2010; Cortese et al., 2010; Fujimoto et al., 2008; Shacklock & Brunetto, 2011). Only a handful of studies have addressed work and family conflict in the United States (Gipson-Jones, 2009; Grzywacz et al., 2006; Lawrence et al., 2013; Unruh et al., 2016). In the state of Florida, the only known study that has been conducted on work and family conflict among nurses sampled only newly licensed nurses (Unruh et al., 2016).
Work and Family Conflict and Personal Demographics

Role and Role Conflict

Role conflict can be described as “psychological tension that is aroused by conflicting role pressures” (Pal, 2012, p. 280). This tension is felt by many nurses who carry out additional roles besides that of just being a nurse. These other roles (e.g., marital status, family involvement, parenting, caring for aging parents, etc.) can also exert pressures that cumulate negatively. Sherman and Pross (2010) noted that this role conflict, left unresolved, can result in loss of productive time at work, increased tendency to make medical errors at work, decreased patient satisfaction, increased staff turnover, and an overall unhealthy work environment.

Women may be especially prone to role tensions that lead to work and family conflict, because they maintain a majority of household and family responsibilities (Chiang & Chang, 2012). However, as family structures change and many dual income families juggle responsibilities collectively, it is possible that both male and female nurses will feel role conflict as a result of work and family conflict.

Age

Nurses of varying ages practice in staff nurse or nurse managerial or executive roles. Depending on level of education pursued, some nurses can practice in their early 20s, while others are practicing well past their retirement age—70s and older. Yildirim and Aycan (2008) found that younger nurses have greater work-to-family conflict. Leineweber et al. (2013) and Grzywacz et al. (2006) confirmed this in their finding that older nurses had less work-family conflict. Also, related to family-work conflict, Unruh et al. (2016) found that older newly licensed RNs experienced less FWC than their younger counterparts. Further research, studying
the age variable, is necessary to better understand nurses’ work and family conflict. This study predicts that younger nurses will experience greater work and family conflict.

Race

Few studies on work and family conflict among nurses report on the variable of race. Of those in the literature, Grzywacz et al. (2006) found that compared to whites, respondents who were Asian reported more frequent family interference with work (FWC) and less frequent work interference with family (WFC).

Gipson-Jones (2009) noted that the numbers of minority nurses, in terms of race, remains dismal. In her studies on African American nurses, she noted that this minority is laced with work and family conflict “compounded by other factors such as being a minority in the profession, discrimination, and racism (historical and present day)” (Gipson-Jones, 2009, p. 304). These factors increase susceptibility for minority nurses to have tensions between work and family conflict. Additional research and reporting on race, as a study variable, is important to better understand nurses’ work and family conflict.

Level of Nursing Education and Professional Practice

Only a few studies on work and family conflict among nurses report on the impact of nursing education level or professional tenure. Yildirim and Aycan (2008) found that nurses with lower levels of education as well as those practicing strictly clinical roles (i.e., non-academic nurses) correlate with higher levels of work-to-family conflict. Grzywacz et al. (2006) reported contradictory findings; although level of nursing education was not associated with work-family conflict, greater nursing education (i.e., higher levels of education) was associated with increased family-work conflict. Additional research and reporting on the level of nursing education, as a study variable, is important to better understand nurses’ work and family conflict.
Gender

Research shows that people are drawn towards careers in which employees represent their own sex (Ji, Lapan & Tate, 2004). This is true for nursing, as it is a female-dominated profession. However, men are entering the nursing profession at an increased rate (Rochlen, Good, & Carver, 2009), and men continue to juggle increased family demands and other personal obligations. As such, men require strong social support just as their female counterparts do (Rochlen et al., 2009).

Colombo and Ghislieri (2008) discussed differences between women and men in general: women often have a greater “invasion of family thoughts at work,” while men often have a greater “invasion of work thoughts at home” (p. 39). Since “family” has represented a traditional role for a woman, women are thought to experience the tasks associated with home and family care with greater frequency (Colombo & Ghislieri, 2008). However, with increasing worldwide involvement of women in the workplace, changes in the roles of both women and men have been felt. “Gender roles are expanding: women are more active in processional work life, whereas men are more active in family life” (Yildirim & Aycan, 2008, p. 2).

Rochlen et al. (2009) analyzed male nurses and found that, on the whole, male nurses experience less conflict about work and family relations. Leineweber et al. (2013) also confirmed these findings, stating that men were significantly associated with decreased work-family conflict. Female nurses report greater chronic work-to-family conflict (50.4%) versus only episodic work-to-family conflict (41.4%) over a six month period (Takeuchi & Yamazaki, 2010). However, Simon et al. (2004) reported differently: an international study across eight European nations found that gender differences were not found in nurses for either WFC or FWC, except in Italy where men reported lower WFC and in the Netherlands where men report
higher WFC than their women counterparts. Additional research and understanding are necessary as gender relates to work and family conflict.

**Marriage and Family**

A greater understanding of nurses’ marital and family needs and responsibilities is important in an effort to retain nurses in the workplace (Farhadi et al., 2013; Kim & Windsor, 2015). As the dynamics of family and household responsibilities shift in the age of millennials, it is increasingly important to understand role pressures and tensions. As it stands, 72.7% of female nurses (compared to only 12.3% of male nurses) do the household chores themselves (Estryn-Béhar & van der Heijden, 2012). As females typically handle the majority of household chores, they present a unique component in understanding family-to-work conflict. It is not surprising, therefore, that married female nurses, per Farhadi et al. (2013), experience greater work-to-family conflict than their male counterparts.

Married nurses, compared to their non-married counterparts, were associated with less work-to-family conflict (Grzywacz et al., 2006). Additionally, nurses with children, compared to their non-parent counterparts, were associated with more frequent work-to-family conflict and family-to-work conflict (Grzywacz et al., 2006; Unruh et al., 2016). Relating to the age of children living at home with a nursing parent, it is important to note that as the age of the youngest child increased, the frequency of family-to-work conflict lessened (Grzywacz et al., 2006). Caring for and meeting the demands of young children has an impact on the work and family conflict tensions.

In the past, some studies have looked at childcare responsibilities and family support, concluding that these variables affect family-to-work conflict but not work-to-family conflict (Burke & Greenglass, 1999, 2001). In the Grzywacz et al. (2006) study, nurses reported that on
the whole, work interfered with family more than family interfered with work, thus showing greater work-family conflict than family-to-work conflict.

Takeuchi and Yamazaki (2010) added to the contribution on work and family conflict, specifically as it relates to family demands. In their study, workplace support proved to be very effective at decreasing work and family conflict, especially among nurses who have no support with household or child care at home (as is often seen among single-parent households) (Takeuchi & Yamazaki, 2010).

**Work and Family Conflict and Work Environment**

Previous studies have found that work characteristics such long work hours, staffing inadequacy, and high job demands are all associated with higher role conflict (Burke, 2002; Burke & Greenglass, 1999; Camerino et al., 2010; Cortese et al., 2010; Estryn-Béhar & van der Heijden, 2012; Gottleib, Kelloway, & Martin-Matthews, 1996; Grzywacz et al., 2006; Hoge, 2008; Leineweber et al., 2013; Yildirim & Aycan, 2008). In contrast, work environment characteristics such as organizational support, staffing and resources allocation, and a positive scheduling climate all go a long way in attempting to decrease work and family conflict (Camerino et al., 2008; Leineweber et al., 2013; Lembrechts et al., 2015). Specifically, positive organizational support reduces the role strain felt among nurses within the work domain in an effort to increase energy and resources for the family domain (Lembrechts et al., 2015).

The next subsections will address various work environment and job-related characteristics and how they impact both role conflict and work and family conflict.

**Work Setting**

Nurses work in a variety of settings and environments, yet over 60% work in hospitals (Mullen, 2016). Hospitals can be described as stressful places to work as potential hazards
include life-threatening injuries and/or illnesses complicated by “overwork, understaffing, tight schedules, paperwork, intricate or malfunctioning equipment, complex hierarchies of authority and skills, dependent and demanding patients, and patient deaths” (Mullen, 2016, p. 96). Despite the generally stressful work environments in hospitals, one study found that nurses reported more frequent family-to-work conflict in the ambulatory care settings than their counterparts who worked in hospitals (Grzywacz et al., 2006). Additional research is needed to assess differences in work and family conflict in different work settings.

Long Shift Length and Overtime

Nurses work varying shift lengths, and no regulation exists to require consistency within the profession (Mullen, 2016). Some nurses work 8 hours per shift, while others average 12 hours or more. Further, nurses often work overtime, holidays, and weekends.

Camerino et al. (2010) found that shift work can often result in demanding situations, causing problems when nurses try to reconcile work and family activities. Numerous studies have concluded that a nurses’ schedule (i.e., shift length and shift time of day) contributes to higher levels of work-family conflict (Camerino et al., 2010; Fujimoto et al., 2008; Grzywacz et al., 2006; Simon et al., 2004; Yildirim & Aycan, 2008).

Previous research also suggests that long working hours predict higher levels of work-family conflict because devoting time to one domain consumes time needed in the other domain (Pal, 2012). Working long or excessive hours, working overtime, or being pressured to work overtime can lead to role strain for nurses both in the work environment and in the home environment (Leineweber et al., 2013).

Further, work schedules that are inflexible or irregular can also create an imbalance for both the work and family domains (Camerino et al., 2010; Fujimoto et al., 2008; Grzywacz et al.,
Yildrim and Aycan (2008) found a direct path involving irregular work schedules, work-to-family conflict, and life/job satisfaction: schedule irregularity was associated with higher WFC and lower life and job satisfaction. To better combat the work and family conflict in these domains, it is important for nurse leaders to address the concerns that come with long or excessive working hours.

Nurses who work irregular hours or consistently work during the night shift face less opportunities for effective communication and thus face an increase in the opportunity for conflict (Camerino et al., 2010). Estryn-Béhar and van der Heijden (2012) found that nurses who work part time experience lower work-to-family conflict as well as those who work 12-hour day shifts or an 8-hour night shift. Those nurses who work 10-hour night shift proved to have more struggles with work-to-family conflict (Estryn-Béhar & van der Heijden, 2012). And another study, conducted by Unruh et al. (2016), found that nurses who work 12-hour shifts experience decreased FWC but increased WFC. Additional research is needed in the area of shift work and work-and-family conflict to better and more consistently understand the relationships between the two variables.

Work Load

In addition to long working hours, nurses also juggle varying work and/or patient loads. No national standard for nurse-patient ratios exists (Mullen, 2016), and only one state (California) mandates these ratios (Mullen, 2016). High nurse-to-patient ratios often lead to nurse stress and fatigue and contribute to increased patient accidents and injuries (Mullen, 2016; Stimpfel & Aiken, 2013; Stimpfel, Sloane & Aiken, 2012). Additional research is needed in this area to understand how nursing workload impacts work and family conflict.
Job Demands

High job demands are also related to increased work-family conflict (Pal, 2012; Simon et al., 2004). These demands and workload stressors take emotional and physical tolls not only on nurses individually but on the work environment collectively (MacPhee, Wardrop & Campbell, 2010). This has implication not only at the individual staffing level but at the aggregate level as well. High job demands are closely related to staffing adequacy (e.g., with appropriate staffing, job demands will be more evenly distributed). Staffing adequacy has been reported as significantly lowering work-family conflict (Leineweber et al., 2013). Further, these increased job demands, coupled with personal factors such as the need for childcare, housework chores, and increased parenting responsibilities, have a negative impact on family-to-work conflict (Takeuchi & Yamazaki, 2010).

One recent study assessed newly licensed RNs and found a relationship between job demands and work-family conflict (Unruh et al., 2016). Characteristics such as day shifts, 12-hour shifts, high patient loads, and working more hours during the week all lead to a perception of greater job difficulties and job demands and corresponded with an increase in work-family conflict (Unruh et al., 2016).

Another element of job demands—teamwork—is important to address as it relates to work and family conflict. Estryn-Béhar and van der Heijden (2012) contended that teams that prove to be low quality result in twice as much work and family conflict as do teams that prove to be high quality. As such, addressing excessive demands on the job, including the value of appropriate teamwork, will lead to a more balanced family and work life.
Management

Nurses cite supportive management structures as an important consideration for decreasing work-to-family conflict. Cortese and colleagues (2010) found that as supportive management increased, work-to-family conflict decreased. In this same study, they also found that supportive management was positively correlated with supportive colleagues and negatively correlated with job demand. Lembrechts et al. (2015) confirmed the converse of this notion is true as well: lack of supervisor support hinders nurses’ work roles. Lack of management supportiveness has been consistently associated with increased work-family conflict (Camerino et al, 2010; Cortese et al., 2010; Gottleib et al., 1996).

Also in line with supportive management structures, supportive workplaces may decrease nurses’ work-family conflict and family-work conflict. Supportive structures such as a family-friendly workplace, on-site childcare or paid maternity leave, and flexible working hours have been noted to decrease conflict levels and increase workplace satisfaction (Takeuchi & Yamazaki, 2010).

These findings hold large implication for health care organizations and the need to supply supportive management and workplace structures for all practicing registered nurses. Sufficient managerial support is fundamental in decreasing conflict levels among work and family domains.

Job Control

Lack of job control (i.e., the ability to control work activities) is a significant predictor of work-family conflict (Pal, 2012). Related to job control is the concept of job autonomy, or the ability to decide when, where, and how the job is to be done (Pal, 2012). When autonomy is high and job control is exercised, there is a positive influence on the work and family domains
(Cleary, Horsfall, Jackson, Muthulakshmi, & Hunt, 2013; Pal, 2012). In contrast, several studies (Gould & Fontenla, 2006; Zangaro & Soeken, 2007) associated lack of autonomy on the job with decreased job satisfaction. This situation further leads to low work engagement and high turnover (Hayes et al., 2006). Thus, it is important to assess work environments to ensure job control and job autonomy are present because the benefits positively impact both work and family dynamics.

**Work and Family Conflict and the Nurse Manager**

To add another dimension to the work-family conflict discussion, it is critical to consider nurse managers, at varying levels, and how they fare with regard to this outcome. Although studies exist that have empirically examined the relative importance of understanding nurse leaders’ stressors, no known studies address work and family conflict for the specific purpose of addressing nurse managers or nurse executives (Kath et al., 2013). Lembrechts et al. (2015) surmised that nurses in leadership, management, or supervisory roles will likely have a higher work-to-family conflict level due to their higher-ranking job and increased level of responsibilities. Higher status jobs can create role stress causing an individual (e.g., nurse manager) to invest significant resources in the work domain, resulting in less time and energy for the family domain; this creates increased work-to-family conflict (Lembrechts et al., 2015). To better understand the relationship between nurse managers/nurse executives and their work and family conflict potential, additional empirical work, such as this study, must be pursued.

A successful nurse leader should exhibit resiliency (the ability to bounce back from hardships) as well as a healthy work and life balance (Zwink, Dzialo, Fink, Oman, & Shiskowsky, 2013). However, this combination can be difficult to achieve when nurses are
handling work environment demands as well as leadership duties. As nurse leaders equip and empower their nursing staff, reducing work and family conflict should be a top priority.

Even though the Institute of Medicine has called for increased nurse leaders in the field, less than 12.5% aspire to a nurse leadership role (IOM, 2010; Tyczkowski et al., 2015). The reasons for lacking desire to pursue leadership positions, nurses note, have to do with excessive role stress and lack of support serving as deterrents to seeking these leadership roles (Tyczkowski et al., 2015).

Other challenges nurse leaders face include the high pressure and high change environments (Zydziunaite & Suominen, 2014). Further, nurse leaders have multiple responsibilities and spans of control that can increase the difficulty in reaching patient outcomes while coaching and mentoring staff nurses (Sherman & Pross, 2010). Achieving organizational outcomes and establishing a positive work environment for staff nurses are expected by nurse managers and nurse executives, despite limited department or organizational resources (Kath et al., 2013).

These difficult job duties of a nursing leader’s role clearly impact a nurse’s decision to take on leadership positions. In order to attract nurse leaders, efforts should be made to reduce determinants of work and family conflict for all nurses, especially nurse leaders.

In sum, as it concerns nurse leaders and work and family conflict, additional studies such as this one should be pursued to better understand this unique yet vitally important nursing population. Although the need for nurse leaders has been long understood and reported, as has the level of pressure this population faces, literature is lacking with empirical substance concerning nursing leaders and their perceived work and family conflicts. Significant work needs to be done in this area of study so that organizations can recruit and retain sufficient nurse
managers and nurse executives as well as provide them with sufficient support through both work and family domains.

**Research Questions and Hypotheses**

Based on the above literature view and findings from previous work-and-family conflict studies, this study will address the following research questions and hypotheses:

1) What are the perceptions of work and family conflict of registered staff nurses, direct care nurse managers, and nurse executives in the state of Florida?

This question will be addressed by analyzing basic descriptive statistics from the sample data.

2) How do personal and work environment characteristics influence perceived work and family conflict among nurses?

Hypothesis 1.1a. Female nurses will experience greater work-to-family conflict than males.

Hypothesis 1.1b. Female nurses will experience greater family-to-work conflict than males.

Hypothesis 1.2a. Younger nurses will experience greater work-to-family conflict than their older counterparts.

Hypothesis 1.2b. Younger nurses will experience greater family-to-work conflict than their older counterparts.

Hypothesis 1.3a. Non-white nurses will experience greater work-to-family conflict than white nurses.

Hypothesis 1.3b. Non-white nurses will experience greater family-to-work conflict than white nurses.

Hypothesis 1.4a. Nurses who are married with children will experience greater work-to-family conflict than nurses who are not married with children.
Hypothesis 1.4b. Nurses who are married with children will experience greater family-to-work conflict than nurses who are not married with children.

Hypothesis 1.5a. Nurses with less professional tenure will experience greater work-to-family conflict.

Hypothesis 1.5b. Nurses with less professional tenure will experience greater family-to-work conflict.

Hypothesis 1.6a. Nurses who work shifts longer than 8 hours will experience greater work-to-family conflict.

Hypothesis 1.6b. Nurses who work shifts longer than 8 hours will experience greater family-to-work conflict.

Hypothesis 1.7a. Nurses who do not have childcare support at work will experience greater work-to-family conflict.

Hypothesis 1.7b. Nurses who do not have childcare support at work will experience greater family-to-work conflict.

Hypothesis 1.8a. The measured Work Environment scales will be statistically significant indicators of work-family conflict.

Hypothesis 1.8b. The Perceived Nursing Work Environment scales will be statistically significant indicators of family-work conflict.

3) How does measured work and family conflict among Florida nurses compare in staff nurses, direct care nurse managers, and nurse administrators/executives?

Hypothesis 2.1a. Nurses who hold direct care nurse manager roles will experience greater work-to-family conflict pressures than staff nurses.
Hypothesis 2.1b. Nurses who hold direct care nurse manager roles will experience greater family-to-work conflict pressures than staff nurses.

Hypothesis 2.2a. Nurses who hold nurse administrator/executive roles will experience greater work-to-family conflict pressures than staff nurses.

Hypothesis 2.2b. Nurses who hold nurse administrator/executive roles will experience greater family-to-work conflict pressures than staff nurses.

Chapter Summary

This chapter applied the Role Strain Theory as a theoretical framework to the research study. Additionally, this chapter assessed the current literature related to work and family conflict within the nursing profession. Hypotheses were created based on previous literature review findings.
CHAPTER THREE: METHODOLOGY

Design

The design for this study is an exploratory, cross-sectional survey design, distributed to a random sample of registered nurses in the state of Florida. The survey was distributed via email using the Qualtrics survey software to generate responses.

Sample

The state of Florida Board of Nursing provides, through publicly accessible data on the state’s Department of Health’s website, the registry of nurses who are currently practicing as nurses. This registry contains personal email addresses (as well as other information per licensee) for over 295,000 nurses practicing at the time of survey distribution (August of 2017). A randomized sample was obtained of approximately 5,000 registered nurses.

A portion of the sample was randomly generated through systematic random sampling (i.e., every nth unit) and of the random sample, 4,989 surveys were distributed. Voided, inactive, retired, or deceased licenses were eliminated from the randomized sample. At the onset, 84 email addresses bounced back as undeliverable or “duplicate,” reducing the sample size to 4,905. The response rate for survey participation was 9% or 443 responses out of 4,905. However, not all sample participants contained completed survey responses; some data analysis methods utilized fewer responses based on missing data. (See section on cleaning data in Chapter Four). Three-hundred fifty-seven completed surveys were analyzed.
Survey Instruments

In addition to including personal and professional demographics of the sample population (see Appendix A), the study used two survey instruments.

Perceived Nursing Work Environment Scale

First, to better understand the work environment of the nursing sample, portions of the Perceived Nursing Work Environment scale were deployed. This instrument is the latest version of the Nursing Work Index- Revised (NWI-R) based on current nursing practice (Choi et al., 2004). The original NWI-R contains factors from Aiken and Patrician (2000) and their well-known nursing work environment scale. The PNWE instrument contains subscales measuring professional practice, nursing management, staffing and resources adequacy, the nursing process, scheduling climate, nurse-physician collaboration, and nursing competence.

A principal component analysis was conducted and resulted in a Cronbach Alpha scores ranging from .91 to .56, depending on the subscale (Cimiotti et al., 2005). One subscale—positive scheduling climate—had a low Cronbach alpha (.56), which was likely due to the fact that it was a three-item subscale (Cimiotti et al., 2005). As such, this particular subscale was removed from this study’s overall instrument. Also, the nursing process subscale was removed from the study’s instrument due to content validity; the questions in this subscale were unrelated to this particular study. See Table 2 for specific Cronbach Alpha scores as well as Appendix B for the complete subset of each PNWE scale and the corresponding questions. A general summary of each subscale is as follows:
Table 2. Results of Principal Component Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Source</th>
<th>Items</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Practice environment (13 items)</td>
<td>Perceived Nursing Work Environment (PNWE) scale</td>
<td>Four point scale from “strongly agree to strongly disagree” that a professional practice environment exists in the workplace.</td>
<td>.91</td>
</tr>
<tr>
<td>Nursing management (5 items)</td>
<td>PNWE scale</td>
<td>Four point scale from “strongly agree to strongly disagree” that effective nursing management structures exist in the workplace.</td>
<td>.88</td>
</tr>
<tr>
<td>Staffing and resources adequacy (5 items)</td>
<td>PNWE scale</td>
<td>Four point scale from “strongly agree to strongly disagree” that adequate staffing and nursing resources exist in the workplace.</td>
<td>.83</td>
</tr>
<tr>
<td>Nurse/physician collaboration (4 items)</td>
<td>PNWE scale</td>
<td>Four point scale from “strongly agree to strongly disagree” that appropriate nurse/physician collaboration exists in the workplace.</td>
<td>.84</td>
</tr>
<tr>
<td>Nursing competence (6 items)</td>
<td>PNWE scale</td>
<td>Four point scale from “strongly agree to strongly disagree” that appropriate nursing competence is evident in the workplace.</td>
<td>.72</td>
</tr>
<tr>
<td>Work-to-family Conflict (5 items)</td>
<td>Work-to-family scale</td>
<td>Four point scale from “strongly agree to strongly disagree” that work related demands impact family obligations.</td>
<td>.93</td>
</tr>
<tr>
<td>Family-to-work Conflict (5 items)</td>
<td>Family-to-work scale</td>
<td>Four point scale from “strongly agree to strongly disagree” that family related demands impact work obligations.</td>
<td>.88</td>
</tr>
</tbody>
</table>
The professional practice subscale measured the presence of continuing education opportunities, career development, and opportunities for advancement.

The nursing management subscale measured the presence of a supervisory staff that is supportive of nurses and appropriate nurse manager support and recognition.

The staffing and resources adequacy subscale measured the presence of adequate staff to get work done, adequate time to discuss patient care problems with other nurses, and a satisfactory salary.

The nurse/physician collaboration subscale measured the presence of teamwork between nurses and doctors and general collaboration between the practitioners.

The nursing competence subscale measured the presence of effective orientation programs for newly employed nurses, clinically competent nurse colleagues, standardized policies and procedures, and effective preceptor programs.

The guiding question for this instrument and each corresponding questions was “Please indicate the extent to which you agree that the following items are present in your current job. Indicate your degree of agreement by selecting the appropriate response.” Respondents indicated the presence of each work environment characteristic through responses on a Likert scale ranging from strongly agree (1) to strongly disagree (4).

This particular survey instrument has been validated and used in recent nursing studies assessing work environment characteristics: Fan et al. (2016); Zhao et al. (2013), and Cimiotti et al. (2005).

Netemeyer, Boles, and McMurrian Work Family Conflict Scale

The second survey instrument used in this study was the Netemeyer, Boles, and McMurrian Work Family Conflict Scale (1996). This instrument captured perceived levels of
both work-family conflict and family-work conflict. This instrument is unique in that it captures both domains of work and family conflict separately instead of capturing the domains together. This scale has gone through multiple iterations to reduce redundancy of survey items. The items on each scale were included as survey questions. See Table 2 for specific Cronbach Alpha scores as well as Appendix C for the specific questions related to the work and family conflict domains. A general summary of each subscale is as follows:

Work-family conflict questions measured the extent to which work demands interfered with home and family life.

Family-work conflict questions measured the extent to which family demands interfered with work-related activities.

The guiding question for this instrument and each corresponding questions was: “Rate the following statements based on your level of agreement.” A series of statements allowed respondents to indicate their degree of agreement with said statement. Respondents indicated the level of agreement to each work-family and family-work conflict statement through responses on a Likert scale ranging from strongly agree (1) to strongly disagree (4).

This particular survey instrument has been validated and used in multiple studies since its development: Hanif and Naqvi (2014), Farhadi et al. (2013), Leaptrott and McDonald (2011), Hoge (2008), Colombo and Ghislieri (2008), and Simon et al. (2004).

Measures

This study encompassed primary data collection for multiple variables. Table 3 contains the operational definitions for this study’s variables. Personal and professional demographics (e.g., gender, race, age, education level, practice history, and specialty) as well as work
environment characteristics make up this study’s independent variables. The study’s dependent variables include work-family conflict and family-work conflict scores.

Table 3. Operational Definitions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Independent</td>
<td>Male= 0; Female= 1</td>
</tr>
<tr>
<td>Race</td>
<td>Independent</td>
<td>White= 1; Black or African American= 2; American Indian or Alaska Native= 3; Asian= 4; Native Hawaiian/Pacific Islander= 5; American Indian/Alaskan Native= 6; Other= 6</td>
</tr>
<tr>
<td>Age</td>
<td>Independent</td>
<td>&lt;30= 1; 30-39= 2; 40-49= 3; 50-59= 4; 60-69= 5; 70 and over= 6</td>
</tr>
<tr>
<td>Marital status</td>
<td>Independent</td>
<td>Single= 1; Married/Domestic Partner= 2; Divorced= 3; widowed= 4</td>
</tr>
<tr>
<td>Children in the home</td>
<td>Independent</td>
<td>0 children= 1; 1 child= 2; 2 children= 3; 3+ children= 4</td>
</tr>
<tr>
<td>Highest nursing degree held</td>
<td>Independent</td>
<td>Associates= 1; Bachelor’s= 2; Graduate= 3; Doctorate= 4; Other= 5</td>
</tr>
<tr>
<td>Working status</td>
<td>Independent</td>
<td>Not working= 0; part time= 1; full time = 2</td>
</tr>
<tr>
<td>Years employed in current nursing role</td>
<td>Independent</td>
<td>&lt; 1 year= 1; 1-3 years= 2; 4-6 years= 3; 7-9 years= 4; 10-12 years= 5; 13 years or longer= 6</td>
</tr>
<tr>
<td>Total years employed in the nursing profession altogether</td>
<td>Independent</td>
<td>&lt; 1 year= 1; 1-3 years= 2; 4-6 years= 3; 7-9 years= 4; 10-12 years= 5; 13 years or longer= 6</td>
</tr>
<tr>
<td>Regular shift length</td>
<td>Independent</td>
<td>&lt; 8 hour shift = 1; 8-11 hour shift= 2; 12 hour shift= 3; Greater than 12 hours per shift = 4</td>
</tr>
<tr>
<td>Childcare support at work: on-site childcare</td>
<td>Independent</td>
<td>1= yes; 2= no</td>
</tr>
<tr>
<td>Childcare support at work: paid leave for childbirth</td>
<td>Independent</td>
<td>1= yes; 2= no</td>
</tr>
<tr>
<td>Practice setting</td>
<td>Independent</td>
<td>Hospital= 1; ambulatory care (including medical/physician practices)= 2; public/community health= 3; home health= 4; academic education= 5; nursing home/extended care= 6; other= 7</td>
</tr>
</tbody>
</table>

34
<table>
<thead>
<tr>
<th>Variable</th>
<th>Type</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role</td>
<td>Independent</td>
<td>staff nurse= 1; nurse manager= 2; administrator or executive= 3; nurse practitioner= 4; nurse anesthetist= 5; nurse midwife= 6; patient coordinator= 7; clinical nurse specialist= 8; instruction/academic= 9; consultant= 10; researcher= 11; informatics= 12; other= 13</td>
</tr>
<tr>
<td>Professional practice environment</td>
<td>Independent</td>
<td>Composite score based on scale total for each nurse</td>
</tr>
<tr>
<td>Nursing management</td>
<td>Independent</td>
<td>Composite score based on scale total for each nurse</td>
</tr>
<tr>
<td>Staffing and resources adequacy</td>
<td>Independent</td>
<td>Composite score based on scale total for each nurse</td>
</tr>
<tr>
<td>Nurse/physician collaboration</td>
<td>Independent</td>
<td>Composite score based on scale total for each nurse</td>
</tr>
<tr>
<td>Nursing competence</td>
<td>Independent</td>
<td>Composite score based on scale total for each nurse</td>
</tr>
<tr>
<td>Work-to-family conflict</td>
<td>Dependent</td>
<td>Composite score based on scale total for each nurse</td>
</tr>
<tr>
<td>Family-to-work-conflict</td>
<td>Dependent</td>
<td>Composite score based on scale total for each nurse</td>
</tr>
</tbody>
</table>

**Work Environment Scales**

The work environment characteristics (e.g., staffing/resource adequacy, nursing management, nurse/physician collaboration) were recorded as a composite score based on each participant’s responses to question scales. This score was computed by totaling the scores from each of the survey respondent’s responses to the ranked questions, per scale. As such, five composite scores were computed for every nurse respondent.

The Professional Practice subscale contained 13 items, each ranging from strongly agree (1) to strongly disagree (4); thus, a total subscale value ranged from 13 to 52. This subscale assessed nurses’ perception of the presence of opportunities for career development and involvement in workplace governance.
The Nursing Management subscale contained 5 items, each ranging from strongly agree (1) to strongly disagree (4); thus a total subscale value ranged from 5 to 20. This subscale assessed nurses’ perception of the presence of management support and its importance.

The Staffing and Resources Adequacy subscale contained 5 items, each ranging from strongly agree (1) to strongly disagree (4); thus a total subscale value ranged from 5 to 20. This subscale assessed nurses’ perception of the presence of adequate workplace resources, including support services, salary, and staff.

The Nurse/Physician Collaboration subscale contained 4 items, each ranging from strongly agree (1) to strongly disagree (4); thus a total subscale value ranged from 4 to 16. This subscale assessed nurses’ perception of the presence of workplace teamwork and collaboration with physicians.

Last, the Nursing Competence subscale contained 6 items, each ranging from strongly agree (1) to strongly disagree (4); thus, a total subscale value ranged from 6 to 24. This subscale assessed nurses’ perception of the presence of workplace competency, including importance of onboarding programs, preceptor mentorship and access to experienced nurses.

These five subscales each had varying ranges (minimum and maximum scale values) based on the varying number of questions in each scale; to remedy this, a conversion score was calculated to allow for equal comparisons between subscales. This score was calculated in SPSS by weighting the scores out of 100.

Work Family Conflict Scales

The outcome, or dependent variables, include work and family conflict, specifically (1) work-to-family conflict and (2) family-to-work conflict. These variables were also based on a composite score, defined by participants’ responses on question scales. See Appendix C for a
breakdown of survey questions and subscales related to work and family conflict domains.

Because respondents indicated their level of agreement with each work-and-family conflict statement on a scale ranging from strongly agree (1) to strongly disagree (4), reverse coding was necessary. Reverse coding allowed for a respondent’s “high agreement” with the presence of conflict to produce a high numerical score (instead of the inverse). In sum, the higher the work-family or family-work conflict score, the higher the nurses’ perceived conflict.

The work-family conflict subscale contained 5 items ranging from strongly agree (1) to strongly disagree (4); thus a total subscale value ranged from 5 to 20. The family-work conflict subscale also contained 5 items ranging from strongly agree (1) to strongly disagree (4); thus a total subscale value ranged from 5 to 20. Again, reverse coding was applied to both scales to indicate that higher scores related to higher conflict.

**Procedures**

**Ethical Considerations**

This study was submitted to the University of Central Florida Institutional Review Board for approval. Prior to sending surveys to the sample population, all necessary applications were submitted and approved. See Appendix D for IRB Outcome and Approval letter. Study participants were made aware that participation was completely voluntary and that all responses would be kept confidential. Study participants could opt out of the survey process at any point.

**Data Collection**

The survey was distributed via email using the Qualtrics survey software to generate responses. The survey was emailed a total of three times, over a 6-week period, to capture sufficient responses: August 9, 2017, August 23, 2017, and again on September 5, 2017. After
the initial survey distribution, subsequent reminder emails were sent to participants (included in the initial randomization) who had not yet completed the survey. With each survey distribution email and subsequent reminder, a concise introduction to the study and the study’s significance were communicated to better garner participant responses (See Appendixes E and F, Informed Consent and Email to Study Participants).

Data Analysis

Data Cleaning and Sorting

Survey data were downloaded into an SPSS file for appropriate cleaning and sorting. All participant responses were kept within the sample, including those with partial responses. This process allowed for a more representative sample on demographic matters, such as age, marital status, working status, etc. However, if responses were missing on particular survey subscales, these participants were excluded from the analysis.

As indicated above, composite scores were generated for the five work environment subscales (i.e., professional practice environment, nursing management, staffing and resource adequacy, nurse/physician collaboration, and nursing competence) as well as the two work and family conflict subscales (work-family and family-work conflict). The work and family conflict subscales also had to be reverse coded to represent a consistent construct: higher scores represented higher conflict levels.

Most variables were coded in the survey to be ordinal in nature and thus remained as is within the SPSS software. However, three variables were recoded into dichotomous variables. Marital status was recoded into a dichotomous variable (1= married; 0= nonmarried); race was recoded into a dichotomous variable (1= white; 0= nonwhite); and primary practice setting was recoded into a dichotomous variable (1= hospital setting; 0= nonhospital setting). Job title was
recoded into a variable with four categories (1= staff nurse; 2= nurse manager; 3= nurse executive; 4= other). This variable was also coded into dummy variables within the regression analysis to understand the effect of variables on each specific nursing role.

**Power Analysis**

To confirm an adequate sample size was sufficiently garnered, a power analysis test was conducted with the XLSTAT software, using the following indicators: alpha = .05; power = .95; effect size= .15. With 21 survey indicators included, a sample size of 225 was necessary to conduct regression analysis for this study. With a sample size of 357 completed surveys, the power analysis indicators were met.

**Assumptions Testing for Hypothesis Testing With Regressions and ANOVA**

Prior to running statistical models for the hypothesis testing, the models were tested for normality. Results from the assumptions testing are discussed in the following chapter. Specifically, in the Durbin Watson statistic tested for independence of errors a value close to “2” indicates independence of errors. Scatterplots were reviewed to ensure a linear relationship between the independent variables and the dependent variable. In addition, homoscedasticity of residuals was assumed as the data points on the scatterplot were appropriately spread (no patterns). Multicollinearity (or correlation between the independent variables) was tested by reviewing the Variance Inflation Factors (VIFs). A value greater than 10 indicated no multicollinearity among variables. Data were also reviewed for normality by reviewing a normality histogram with a normal curve.

In addition to these tests, ANOVA also requires homogeneity of variance. This was reviewed by looking at the Levine’s test for equality of variances where a p value of greater than .05 is necessary (i.e., not significant) to indicate homogeneity (Pallant, 2013).
**Regression Analysis**

Hypotheses were tested using ordinary least squares multiple regression analysis. Multiple regression is a predictive statistical analysis method that analyzes the impact of independent variables on the study’s dependent, or outcome variable. Multiple regression also provides a “model fit” determination and describes the proportion of the variance of the dependent variable, as explained by the independent variables (Agresti & Finlay, 1997).

Within the regression model output, the R-squared statistic is important to note as this statistic communicates variation. R-squared indicates how much of the independent variable can be explained by the variation in the dependent variable (Agresti & Finlay, 1997). Statistical significance of the model and its corresponding variables was set at a p value of .05.

**Analysis of Variance**

This study also utilized analysis of variance (or ANOVA) to compare means scores between groups, in this case different nursing roles: staff nurse, nursing manager, and nurse administrator/executive. ANOVA assesses one independent variable (or factor) that has varying levels and one continuous dependent variable (Pallant, 2013). ANOVA compares the variance between groups and describes the variability within the groups, indicated by an F statistic. The larger the F value, the greater the variability. The p value indicates whether there is a significant difference among the mean scores between groups (Pallant, 2013). The post hoc test utilized was Fisher’s Least Significant Difference (LSD) because this test considers groups of unequal numbers, which applied in this case.
Chapter Summary

This chapter conveyed the study’s methodology and research design. The sampling technique was described in addition to survey administration procedures. Lastly, the assumptions testing process was defined in an effort to begin data analysis, described in Chapter Four.
CHAPTER FOUR: DATA ANALYSIS AND RESULTS

This chapter describes the study’s results on work-and-family conflict perceptions among nurses in the state of Florida. First, descriptive results are reported and include a description of the sample respondents and their responses to demographic questions, work environment questions, and work-and-family conflict questions.

Following descriptive results, bivariate analysis displays nurses’ demographic factors as they relate to work-and-family conflict scores.

Next, regression results indicate which independent variables were significant in determining work-family and family-work conflict. Appropriate hypothesis testing follows this section.

Last, ANOVA results indicate the statistically significant mean difference of work-family and family-work conflict among nurses in varying roles.

Descriptive Results

Table 4 presents the results from the descriptive statistics. The sample of nurses is predominately female (91.8%), married (71.4%) and white (79.9%), between the ages of 50-59 years old (32.2%). This represents a relatively older sample compared to the average age of registered nurses practicing in the state of Florida of 47.5 years (FCN, 2016c). Only 10.5% of the sample was less than 30 years old. Nearly half of the survey respondents reported having no children living in the home (49.8%) and this certainly influences the study’s outcomes on work and family conflict.
Table 4. Descriptive Statistics for Independent Variables

<table>
<thead>
<tr>
<th>Personal and work environment characteristics</th>
<th>% of sample</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>8.2</td>
</tr>
<tr>
<td>Female</td>
<td>91.8</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
</tr>
<tr>
<td>Married or Domestic Partner</td>
<td>71.4</td>
</tr>
<tr>
<td>Nonmarried</td>
<td>28.6</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>79.9</td>
</tr>
<tr>
<td>Non-white</td>
<td>21.1</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>Less than 30 years</td>
<td>10.5</td>
</tr>
<tr>
<td>30-39 years</td>
<td>19.5</td>
</tr>
<tr>
<td>40-49 years</td>
<td>21.8</td>
</tr>
<tr>
<td>50-59 years</td>
<td>32.0</td>
</tr>
<tr>
<td>60-69 years</td>
<td>13.2</td>
</tr>
<tr>
<td>70 years or older</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Number of children living in the home</strong></td>
<td></td>
</tr>
<tr>
<td>No children</td>
<td>49.8</td>
</tr>
<tr>
<td>1 child</td>
<td>22.5</td>
</tr>
<tr>
<td>2 children</td>
<td>14.2</td>
</tr>
<tr>
<td>3 or more children</td>
<td>13.5</td>
</tr>
<tr>
<td><strong>Primary practice setting</strong></td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td>55.2</td>
</tr>
<tr>
<td>Nonhospital</td>
<td>44.8</td>
</tr>
<tr>
<td><strong>Current job title</strong></td>
<td></td>
</tr>
<tr>
<td>Staff nurse</td>
<td>61.2</td>
</tr>
<tr>
<td>Nurse manager</td>
<td>8.6</td>
</tr>
<tr>
<td>Administrator or executive</td>
<td>4.5</td>
</tr>
<tr>
<td>Other</td>
<td>25.7</td>
</tr>
<tr>
<td><strong>Regular shift length</strong></td>
<td></td>
</tr>
<tr>
<td>Less than 8 hours per shift</td>
<td>8.4</td>
</tr>
<tr>
<td>8-11 hours per shift</td>
<td>43.0</td>
</tr>
<tr>
<td>12 hours per shift</td>
<td>38.0</td>
</tr>
<tr>
<td>Greater than 12 hours per shift</td>
<td>10.6</td>
</tr>
<tr>
<td><strong>Current working status</strong></td>
<td></td>
</tr>
<tr>
<td>Not working</td>
<td>8.6</td>
</tr>
<tr>
<td>Part Time</td>
<td>11.9</td>
</tr>
<tr>
<td>Full Time</td>
<td>79.5</td>
</tr>
</tbody>
</table>
The primary practice setting selected by survey respondents was hospitals (55.2%) and the most commonly reported role was that of staff nurse (61.2%). Nurse managers made up 8.6% of the sample and nurse administrators or executives made up 4.5% of the sample. Other nursing roles (i.e., nurse practitioners, nurse anesthetists, nurse midwives, educators, consultants or other categories) made up 25.7% of the sample.
The most commonly cited shift length was 8-11 hours (43%) followed by 12 hours (38%), and the majority of nurses reported working full-time (79.5%). The most commonly cited degree held by the sample was equal representation between an associate’s degree and a bachelor’s degree (both 39.3%). This prevalence of two- and four-year degrees could be one reason why there were not many reported managers or administrators/executives in the sample (8.6% and 4.5%, respectively).

The sample of nurses had been employed in their current workplace setting predominantly 1-3 years (31.9%), followed by less than 1 year (19.6%). However, the majority of the sample had been in the nursing profession for 13 years or more (59.7%). This finding indicates nurses are not hesitant to change practice settings when need be.

Concerning employer support for childcare and maternity leave, the majority of nurses reported their employer does not provide paid leave for childbirth (54.9%) nor do they provide on-site childcare support at work (88.9%).

The Perceived Nursing Work Environment scale composite scores are presented in Table 5. These five subscales each had varying ranges (i.e., minimum and maximum values), so a conversion score was calculated to allow for equal comparisons. The raw scores were converted to percentages to allow the scores to be comparable across scales. Table 5 displays the output of each original, unweighted subscale and its range and mean followed by the newly calculated, weighted subscale range and mean. The higher the mean score, the more nurses agreed that the workforce support area was lacking.
Table 5. Perceived Nursing Work Environment Subscale Means

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unweighted</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional practice</td>
<td>238</td>
<td>13</td>
<td>52</td>
<td>29.01</td>
<td>9.22</td>
</tr>
<tr>
<td>Nursing management</td>
<td>246</td>
<td>5</td>
<td>20</td>
<td>10.39</td>
<td>4.38</td>
</tr>
<tr>
<td>Staffing resources</td>
<td>249</td>
<td>5</td>
<td>20</td>
<td>12.43</td>
<td>4.22</td>
</tr>
<tr>
<td>Nurse/Physician collaboration</td>
<td>250</td>
<td>4</td>
<td>16</td>
<td>7.56</td>
<td>2.81</td>
</tr>
<tr>
<td>Nursing competence</td>
<td>239</td>
<td>6</td>
<td>24</td>
<td>11.97</td>
<td>4.19</td>
</tr>
<tr>
<td><strong>Weighted</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional practice, weighted</td>
<td>238</td>
<td>25</td>
<td>100</td>
<td>55.79</td>
<td>17.74</td>
</tr>
<tr>
<td>Nursing management, weighted</td>
<td>246</td>
<td>25</td>
<td>100</td>
<td>51.99</td>
<td>21.90</td>
</tr>
<tr>
<td>Staffing resources, weighted</td>
<td>249</td>
<td>25</td>
<td>100</td>
<td>62.16</td>
<td>21.12</td>
</tr>
<tr>
<td>Nurse/Physician collaboration, weighted</td>
<td>250</td>
<td>25</td>
<td>100</td>
<td>47.25</td>
<td>17.62</td>
</tr>
<tr>
<td>Nursing competence, weighted</td>
<td>239</td>
<td>25</td>
<td>100</td>
<td>49.91</td>
<td>17.48</td>
</tr>
</tbody>
</table>

Nurses reported the “most present” areas of workforce support (i.e., strongly agree) included, in progressive order, nurse/physician collaboration, nursing competence (orientation and preceptor programs), and nursing management support (i.e., a supportive supervisory staff). The two “least present” areas of workforce support included professional practice followed by adequate staffing resources. This finding illustrates that nurses reported a lower presence of adequate staffing resources and opportunities for growth in their professional practice than they reported the presence of appropriate nursing management, appropriate nursing competence, and nurse/physician collaboration.

Work and family conflict composite scores were also analyzed across the entire sample of nurses. Table 6 indicates that, on the whole, the sample population experienced greater work-to-family conflict than family-to-work conflict with means valued at 13.6 and 8.8, respectively.
Table 6. Work and Family Conflict Subscale Means

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>WFC Total Score</td>
<td>260</td>
<td>5</td>
<td>20</td>
<td>13.65</td>
<td>4.13</td>
</tr>
<tr>
<td>FWC Total Score</td>
<td>255</td>
<td>5</td>
<td>20</td>
<td>8.86</td>
<td>3.32</td>
</tr>
</tbody>
</table>

**Bivariate Analysis**

Table 7 presents the work-family and family-work conflict scores across all independent variables. This was not a test of significance but rather offered another representation of work-and-family conflict scores across all independent variables, as derived from the sample.

Table 7. Bivariate Descriptive Analysis of Work-Family and Family-Work Conflict Scores by Independent Variable

<table>
<thead>
<tr>
<th></th>
<th>WFC score</th>
<th>FWC score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>12.81</td>
<td>9.38</td>
</tr>
<tr>
<td>Female</td>
<td>13.72</td>
<td>8.81</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married or Domestic Partner</td>
<td>13.67</td>
<td>8.75</td>
</tr>
<tr>
<td>Non-married</td>
<td>13.52</td>
<td>9.16</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>13.28</td>
<td>8.45</td>
</tr>
<tr>
<td>Non-white</td>
<td>15.01</td>
<td>10.38</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 30 years</td>
<td>14.00</td>
<td>9.00</td>
</tr>
<tr>
<td>30-39 years</td>
<td>13.71</td>
<td>9.50</td>
</tr>
<tr>
<td>40-49 years</td>
<td>14.39</td>
<td>8.69</td>
</tr>
<tr>
<td>50-59 years</td>
<td>12.93</td>
<td>8.39</td>
</tr>
<tr>
<td>60-69 years</td>
<td>13.48</td>
<td>9.23</td>
</tr>
<tr>
<td>70 years or older</td>
<td>14.25</td>
<td>9.50</td>
</tr>
<tr>
<td><strong>Number of children living in the home</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No children</td>
<td>12.95</td>
<td>8.42</td>
</tr>
<tr>
<td>1 child</td>
<td>14.37</td>
<td>9.44</td>
</tr>
<tr>
<td>2 children</td>
<td>14.32</td>
<td>9.22</td>
</tr>
<tr>
<td>3 or more children</td>
<td>14.30</td>
<td>9.17</td>
</tr>
<tr>
<td></td>
<td>WFC score</td>
<td>FWC score</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td><strong>Primary practice setting</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td>13.62</td>
<td>8.83</td>
</tr>
<tr>
<td>Nonhospital</td>
<td>13.67</td>
<td>8.89</td>
</tr>
<tr>
<td><strong>Current job title</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff nurse</td>
<td>13.63</td>
<td>8.87</td>
</tr>
<tr>
<td>Nurse manager</td>
<td>14.52</td>
<td>8.17</td>
</tr>
<tr>
<td>Administrator or executive</td>
<td>16.33</td>
<td>9.25</td>
</tr>
<tr>
<td>Other</td>
<td>12.84</td>
<td>9.01</td>
</tr>
<tr>
<td><strong>Regular shift length</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 8 hours per shift</td>
<td>12.68</td>
<td>10.0</td>
</tr>
<tr>
<td>8-11 hours per shift</td>
<td>13.13</td>
<td>8.53</td>
</tr>
<tr>
<td>12 hours per shift</td>
<td>13.82</td>
<td>8.95</td>
</tr>
<tr>
<td>Greater than 12 hours per shift</td>
<td>15.81</td>
<td>8.92</td>
</tr>
<tr>
<td><strong>Current working status</strong></td>
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<td></td>
</tr>
<tr>
<td>Not working</td>
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<td>9.44</td>
</tr>
<tr>
<td>Part Time</td>
<td>13.21</td>
<td>9.65</td>
</tr>
<tr>
<td>Full Time</td>
<td>13.77</td>
<td>8.68</td>
</tr>
<tr>
<td><strong>Highest nursing degree held</strong></td>
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<td></td>
</tr>
<tr>
<td>Associates degree</td>
<td>14.24</td>
<td>8.51</td>
</tr>
<tr>
<td>Bachelors degree</td>
<td>13.13</td>
<td>8.73</td>
</tr>
<tr>
<td>Graduate degree</td>
<td>13.41</td>
<td>9.89</td>
</tr>
<tr>
<td>Doctorate degree</td>
<td>13.80</td>
<td>7.50</td>
</tr>
<tr>
<td>Other</td>
<td>13.50</td>
<td>8.85</td>
</tr>
<tr>
<td><strong>Length of time employed in current workplace setting</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>13.17</td>
<td>8.88</td>
</tr>
<tr>
<td>1-3 years</td>
<td>14.18</td>
<td>9.49</td>
</tr>
<tr>
<td>4-6 years</td>
<td>14.53</td>
<td>8.48</td>
</tr>
<tr>
<td>7-9 years</td>
<td>12.06</td>
<td>7.20</td>
</tr>
<tr>
<td>10-12 years</td>
<td>12.41</td>
<td>8.35</td>
</tr>
<tr>
<td>13 years or longer</td>
<td>13.36</td>
<td>8.78</td>
</tr>
<tr>
<td><strong>Length of time employed in the profession altogether</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>13.30</td>
<td>9.40</td>
</tr>
<tr>
<td>1-3 years</td>
<td>14.00</td>
<td>9.12</td>
</tr>
<tr>
<td>4-6 years</td>
<td>15.00</td>
<td>10.25</td>
</tr>
<tr>
<td>7-9 years</td>
<td>11.90</td>
<td>7.90</td>
</tr>
<tr>
<td>10-12 years</td>
<td>13.52</td>
<td>8.64</td>
</tr>
<tr>
<td>13 years or longer</td>
<td>13.62</td>
<td>8.68</td>
</tr>
<tr>
<td><strong>Employer provides onsite childcare support at work</strong></td>
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<td></td>
</tr>
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<td>8.31</td>
</tr>
<tr>
<td>No</td>
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<td>8.91</td>
</tr>
<tr>
<td>Employer provides paid leave for childbirth</td>
<td>WFC score</td>
<td>FWC score</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
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<td>13.78</td>
<td>8.96</td>
</tr>
</tbody>
</table>

Females have a greater work-family conflict score than males, but males have a greater family-work conflict score. Those nurses who are married or living with a domestic partner have greater work-to-family conflict but less family-to-work conflict than their non-married counterparts. Also, white nurses, compared to non-white nurses, experienced less work-family and family-work conflict.

Conflict scores were similar across age groups. Those experiencing the least amount of work-family conflict were 50-59 years old, while those experiencing the most were 40-49 years old. Regarding family-to-work conflict, 50-59 years old experienced the least amount of conflict, but those either 30-39 years or 70 years and older both experienced the most family-to-work conflict.

Those nurses with children living in the home experienced greater work-to-family conflict than nurses with zero children living in the home. Additionally, conflict levels were not very different between nurses having 1 child, 2 children or 3 or more children in the home; scores averaged around 14.3 and varied by only a hundredth of a percentage point. Regarding family-to-work conflict, those with no children in the home had less conflict, while those with children had more conflict. Again, conflict levels were not different between nurses having 1 child, 2 children or 3 or more children in the home; scores averaged around 9.2 and varied by only a tenth of a percentage point.
Practice setting showed little variation in work-to-family or family-to-work conflict scores. Both hospital and non-hospital settings averaged around 13.6 for family-to-work, but they averaged around 8.8 for work-family conflict.

There was no notable variation in the conflict scores among nurse roles. Staff nurses reported less work-family conflict than nursing managers (second most) and nursing executives (highest). When looking at family-work conflict, nurse managers had the lowest score, followed by staff nurses and lastly, nurse executives.

Nurses who worked fewer than eight hours reported less family-to-work conflict, but that level increased as the shift length increased, with the greatest conflict level maxing out at 12+ hours per shift. The opposite was true for family-to-work conflict. Nurses who worked less than 8 hours reported greater conflict in this area, but that decreased as the shift length increased.

Nurses working full time reported greater work-family conflict than nurses working part time. Additionally, nurses working full time reported less family-work conflict than nurses working part time.

Regarding degrees held, nurses with only an associate’s degree reported higher work-family conflict scores. Nurses with bachelor’s, graduate, or doctoral degrees averaged similar scores for work-family, differing by just a tenth of a percentage point. Nurses with doctorate degrees reported less family-work conflict scores followed by associates, bachelor’s, and then graduate level degree nurses.

Regarding nurses’ length of time in their current workplace setting, both work-family and family-work conflict appear to increase until 7-9 years then fall at 7-9 years, then rise again. Those with the highest reported work-family conflict stated they had been employed 4-6 years in
their current setting. Family-work conflict also followed this pattern, with the highest conflict at 1-3 years and the lowest at 7-9 years.

This pattern was similar with the nurses’ length of time in profession altogether. Nurses with the highest work-family conflict stated they had been employed in the profession for 4-6 years. Those with the lowest work-family and family-work conflict stated they had been employed in the profession for 7-9 years.

The final areas concerned employer childcare support and paid leave for childbirth. Nurses who had employers who provided on-site childcare support at work reported less work-to-family and family-to-work conflict. Similarly, nurses who had employers who provided paid leave for childbirth reported less work-to-family and family-to-work conflict.

Regression Analysis and ANOVA

Assumptions Testing: Regression

Prior to running statistical models for the hypothesis testing, the models were tested for normality. Each regression model had one continuous dependent variable with a number of accompanying independent variables. The Durbin Watson statistic was within range on all regression models (near “2”). For the work-to-family regression model, the Durbin Watson statistic was reported as 1.7. For the family-to-work regression model, the Durbin Watson statistic was reported as 1.9. Histograms and P-P Plots were reviewed as were the regression standardized residuals; all were within normal range. Additionally, variance inflation factors (VIFs) were reviewed to determine potential multicollinearity among variables. All VIF factors were within normal range (under 10).
Assumptions Testing: ANOVA

All assumptions were met for the ANOVA model for this study. Data observations were independent of each other and normally distributed. Homogeneity of variance was indicated with values greater than .05 within the Levene’s test for equality for both work-family and family-work conflict.

Regression and ANOVA Results

The regression and ANOVA results are discussed below by hypotheses. Regression results indicate which variables were significant in the work-family and family-work models. ANOVA results indicate whether there is a statistical difference in means across nurse roles (staff nurse, nurse manager, and nurse administered/executive) and their perceived work-family and family work conflict.

Ordinary least squares multiple regression analyses were conducted, testing the study’s hypotheses by analyzing the relationships between the dependent variables (work and family conflict, in both directions) and multiple independent variables (see Table 3). This statistical method was helpful in understanding which independent variables have significant impacts on work-family and family-work conflict and the direction of that impact.

Two regression models were performed to test the hypotheses: one model tested hypotheses for work-to-family conflict and the other tested hypotheses for family-to-work conflict. These models addressed the hypotheses under research question 2.

One analysis of variance test was conducted to compare work-family and family-work conflict scores within groups of nurses: staff nurses, nurse managers, and nurse executives. This statistical model was helpful in understanding differences of conflict levels between different nursing roles.
Research Questions and Hypothesis Testing

1. What are the perceptions of work and family conflict of all nurses in the state of Florida?

These results are presented in Table 6 and Table 7 and have been described above. Descriptively, nurses experience greater work-to-family conflict than family-work-conflict. Further, females reported greater work-family conflict than males; males reported greater family-work conflict than females. Staff nurses reported greater work-family conflict than their managerial counterparts: nurse managers and executives. Executives reported the highest level of work-family conflict.

2. How do personal and work environment characteristics influence perceived work and family conflict among nurses?

This question was tested using two regression models with the following independent variables: age, gender, race, marital status, number of children living in the home, practice setting, job title, shift length, length of employment in current setting, length of employment in profession, highest nursing degree held, on-site childcare support at work, paid leave for childbirth, and the five nursing environment subscales. Each model used a different dependent variable: one used work-family conflict while the other one used family-work conflict. Several hypotheses based on this question were tested in the two models. Results from the two regressions are presented in Table 8 and Table 9, followed by the summary of the hypotheses test results.
Table 8. Work-Family Conflict Regression Model

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>4.583</td>
<td>3.070</td>
</tr>
<tr>
<td>Age</td>
<td>.032</td>
<td>.296</td>
</tr>
<tr>
<td>Female</td>
<td>1.553</td>
<td>1.021</td>
</tr>
<tr>
<td>White</td>
<td>-1.638</td>
<td>.672</td>
</tr>
<tr>
<td>Married</td>
<td>.101</td>
<td>.585</td>
</tr>
<tr>
<td>Number of children living in your home</td>
<td>.425</td>
<td>.248</td>
</tr>
<tr>
<td>Hospital Practice Setting</td>
<td>-.918</td>
<td>.651</td>
</tr>
<tr>
<td>Nursing Manager</td>
<td>2.590</td>
<td>1.030</td>
</tr>
<tr>
<td>Nursing Administrator/Executive</td>
<td>3.842</td>
<td>1.353</td>
</tr>
<tr>
<td>Other nurse role</td>
<td>.558</td>
<td>.732</td>
</tr>
<tr>
<td>Shift Length</td>
<td>1.586</td>
<td>.406</td>
</tr>
<tr>
<td>Length of employment in current setting</td>
<td>-.108</td>
<td>.173</td>
</tr>
<tr>
<td>Length of employment in profession</td>
<td>-.025</td>
<td>.247</td>
</tr>
<tr>
<td>Highest nursing degree held</td>
<td>-.366</td>
<td>.344</td>
</tr>
<tr>
<td>Onsite childcare support at work</td>
<td>-.292</td>
<td>.862</td>
</tr>
<tr>
<td>Paid leave for childbirth</td>
<td>.197</td>
<td>.566</td>
</tr>
<tr>
<td>Professional Practice</td>
<td>-.007</td>
<td>.050</td>
</tr>
<tr>
<td>Nursing Management</td>
<td>.153</td>
<td>.105</td>
</tr>
<tr>
<td>Staffing Resources</td>
<td>.076</td>
<td>.107</td>
</tr>
<tr>
<td>Nurse/Physician Collaboration</td>
<td>.129</td>
<td>.122</td>
</tr>
<tr>
<td>Nursing Competence</td>
<td>.042</td>
<td>.101</td>
</tr>
</tbody>
</table>

*a Model has an adjusted R square of .203 and a Durbin Watson of 1.7*
Table 9. Family-Work Conflict Regression Model

<table>
<thead>
<tr>
<th>Model²</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
<th>t</th>
<th>p- value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
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<td>2.686</td>
<td>3.328</td>
<td>.001</td>
</tr>
<tr>
<td>Age</td>
<td>.420</td>
<td>.259</td>
<td>.174</td>
<td>1.623</td>
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<tr>
<td>Female</td>
<td>-.054</td>
<td>.888</td>
<td>-.004</td>
<td>-.061</td>
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<tr>
<td>White</td>
<td>-1.794</td>
<td>.586</td>
<td>-.233</td>
<td>-3.063</td>
</tr>
<tr>
<td>Married</td>
<td>-.578</td>
<td>.514</td>
<td>-.082</td>
<td>-1.125</td>
</tr>
<tr>
<td>Number of children living in your home</td>
<td>.320</td>
<td>.218</td>
<td>.109</td>
<td>1.470</td>
</tr>
<tr>
<td>Hospital Practice Setting</td>
<td>.416</td>
<td>.567</td>
<td>.063</td>
<td>.734</td>
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<tr>
<td>Nursing Manager</td>
<td>-.098</td>
<td>.897</td>
<td>-.008</td>
<td>-.110</td>
</tr>
<tr>
<td>Nursing Administrator/Executive</td>
<td>.756</td>
<td>1.179</td>
<td>.051</td>
<td>.642</td>
</tr>
<tr>
<td>Other nurse role</td>
<td>-.018</td>
<td>.637</td>
<td>-.002</td>
<td>-.029</td>
</tr>
<tr>
<td>Shift Length</td>
<td>.043</td>
<td>.358</td>
<td>.010</td>
<td>.120</td>
</tr>
<tr>
<td>Length of employment in current setting</td>
<td>-.017</td>
<td>.152</td>
<td>-.009</td>
<td>-.114</td>
</tr>
<tr>
<td>Length of employment in profession</td>
<td>-.415</td>
<td>.218</td>
<td>-.217</td>
<td>-1.902</td>
</tr>
<tr>
<td>Highest nursing degree held</td>
<td>.247</td>
<td>.300</td>
<td>.064</td>
<td>.824</td>
</tr>
<tr>
<td>Onsite childcare support at work</td>
<td>-.068</td>
<td>.751</td>
<td>-.007</td>
<td>-.091</td>
</tr>
<tr>
<td>Paid leave for childbirth</td>
<td>1.028</td>
<td>.495</td>
<td>.159</td>
<td>2.076</td>
</tr>
<tr>
<td>Professional Practice</td>
<td>-.040</td>
<td>.044</td>
<td>-.112</td>
<td>-.912</td>
</tr>
<tr>
<td>Nursing Management</td>
<td>.007</td>
<td>.092</td>
<td>.009</td>
<td>.077</td>
</tr>
<tr>
<td>Staffing Resources</td>
<td>-.091</td>
<td>.093</td>
<td>-.118</td>
<td>-.975</td>
</tr>
<tr>
<td>Nurse/Physician Collaboration</td>
<td>.133</td>
<td>.107</td>
<td>.118</td>
<td>1.240</td>
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<tr>
<td>Nursing Competence</td>
<td>.072</td>
<td>.089</td>
<td>.092</td>
<td>.813</td>
</tr>
</tbody>
</table>

²Model has an adjusted R square of .046 and a Durbin Watson of 1.9

Table 8 and Table 9 indicate the following results of the hypotheses tests:
Hypothesis 1.1a. Female nurses will experience greater work-to-family conflict than males.
Not supported: Gender was not a statistically significant predictor of WFC. There was no significant difference in gender roles and work-to-family conflict scores.

Hypothesis 1.1b. Female nurses will experience greater family-to-work conflict than males.
Not supported: Gender was not a statistically significant predictor of FWC. There was no significant difference in gender roles and family-to-work conflict scores.

Hypothesis 1.2a. Younger nurses will experience greater work-to-family conflict than their older counterparts.
Not supported: Age was not a statistically significant predictor of WFC. There was no significant difference in ages and work-to-family conflict scores.

Hypothesis 1.2b. Younger nurses will experience greater family-to-work conflict than their older counterparts
Not supported: Age was not a statistically significant predictor of FWC. There was no significant difference in ages and family-to-work conflict scores.

Hypothesis 1.3a. Non-white nurses will experience greater work-to-family conflict than white nurses.
Supported: Yes, race was a significant predictor of WFC. Compared to white nurses, non-white nurses experience greater WFC.

Hypothesis 1.3b. Non-white nurses will experience greater family-to-work conflict than white nurses.
Supported: Yes, race was a significant predictor of FWC. Compared to white nurses, non-white nurses experience greater FWC.
Hypothesis 1.4a. Nurses who are married with children will experience greater work-to-family conflict than nurses who are not married with children.

Not supported: Marital status was not a significant predictor of WFC. There was no significant difference in married vs. non-married nurses and work-to-family conflict scores.

Not supported: Children living in the home was not a significant predictor of WFC. There was no significant difference in nurses with children in the home vs. no children in the home and work-to-family conflict scores.

Hypothesis 1.4b. Nurses who are married with children will experience greater family-to-work conflict than nurses who are not married with children.

Not supported: Marital status was not a significant predictor of FWC. There was no significant difference in married vs. non-married nurses and family-to-work conflict scores.

Not supported: Children living in the home was not a significant predictor of FWC. There was no significant difference in nurses with children in the home vs. no children in the home and family-to-work conflict scores.

Hypothesis 1.5a. Nurses with less professional tenure will experience greater work-to-family conflict.

Not supported: nursing tenure was not a significant predictor of WFC. There was no significant difference in tenure lengths and work-to-family conflict scores.

Hypothesis 1.5b. Nurses with less professional tenure will experience greater family-to-work conflict.

Not supported: nursing tenure was not a significant predictor of FWC. There was no significant difference in tenure lengths and family-to-work conflict scores.
Hypothesis 1.6a. Nurses who work shifts longer than 8 hours will experience greater work-to-family conflict.

Supported: Shift length was a significant predictor of WFC. The longer the shift length worked by the nurse, the greater the work-to-family conflict score.

Hypothesis 1.6b. Nurses who work shifts longer than 8 hours will experience greater family-to-work conflict.

Not supported: Shift length was not a significant predictor of FWC. There was no significant difference in the family-to-work conflict scores and shift length.

Hypothesis 1.7a. Nurses who do not have childcare support at work will experience greater work-to-family conflict.

Not supported: Having childcare support at work was not a significant predictor of WFC. There was no significant difference between nurses with and without childcare support at work and work-to-family conflict scores.

Hypothesis 1.7b. Nurses who do not have childcare support at work will experience greater family-to-work conflict.

Supported: Having childcare support at work was a significant predictor of FWC. Nurses who reported having paid childcare leave for childbirth showed a statistically significant difference in family-to-work conflict scores than nurses who did not report the support.

Hypothesis 1.8a. The Perceived Nursing Work Environment scales will be a statistically significant indicator of work-family conflict.

Not supported: The work environment scales did not prove to be a statistically significant indicator of work-family conflict.
Hypothesis 1.8b. The Perceived Nursing Work Environment scales will be a statistically significant indicator of family-work conflict.

Not supported: The work environment scales did not prove to be a statistically significant indicator of family-work conflict.

3) How does measured work and family conflict among Florida nurses compare in staff nurses, direct care nurse managers, and nurse administrators/executives?

This question and its hypotheses were tested using a comparison of means tests: ANOVA. Additionally, Table 10 confirms the hypotheses results and statistical differences. Table 10 displays the ANOVA results comparing means between the groups of nursing roles: staff nurse, nurse manager, nurse administrator/executive and their work-family and family-work conflict scores.
Table 10. ANOVA Results

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>(I) Job title</th>
<th>(J) Job title</th>
<th>Mean Difference (I-J)</th>
<th>Std. error</th>
<th>p-value</th>
<th>95% confidence interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>WFC Total Score</td>
<td>Staff Nurse</td>
<td>Nurse Manager</td>
<td>-.881</td>
<td>.910</td>
<td>.333</td>
<td>-.2.674</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Administrator/Executive</td>
<td>-2.693*</td>
<td>1.221</td>
<td>.028</td>
<td>-5.099</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>.796</td>
<td>.603</td>
<td>.188</td>
<td>-1.392</td>
</tr>
<tr>
<td>Nurse Manager</td>
<td>Staff Nurse</td>
<td>Nurse Manager</td>
<td>.881</td>
<td>.910</td>
<td>.333</td>
<td>-1.910</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Administrator/Executive</td>
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<tr>
<td></td>
<td></td>
<td>Other</td>
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<td>.992</td>
<td>.092</td>
<td>-.276</td>
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<tr>
<td>Administrator/Executive</td>
<td>Staff Nurse</td>
<td>Nurse Manager</td>
<td>2.693*</td>
<td>1.221</td>
<td>.028</td>
<td>2.287</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
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<td>1.284</td>
<td>.007</td>
<td>6.019</td>
</tr>
<tr>
<td>Other</td>
<td>Staff Nurse</td>
<td>Nurse Manager</td>
<td>-.796</td>
<td>.603</td>
<td>.188</td>
<td>-2.1.984</td>
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<tr>
<td></td>
<td></td>
<td>Administrator/Executive</td>
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<td>.992</td>
<td>.092</td>
<td>-3.632</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
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<td>1.284</td>
<td>.007</td>
<td>-6.019</td>
</tr>
<tr>
<td>FWC Total Score</td>
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<td>.742</td>
<td>.347</td>
<td>-.762</td>
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<tr>
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<tr>
<td>Nurse Manager</td>
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<td>.742</td>
<td>.347</td>
<td>-2.161</td>
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<tr>
<td></td>
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<td></td>
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<tr>
<td>Administrator/Executive</td>
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<td>Nurse Manager</td>
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<td>.996</td>
<td>.706</td>
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<tr>
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<tr>
<td>Other</td>
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<td>Nurse Manager</td>
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<td>.824</td>
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<td>Administrator/Executive</td>
<td>-.2338</td>
<td>1.049</td>
<td>.824</td>
<td>-2.300</td>
</tr>
</tbody>
</table>

* The mean difference is significant at the 0.05 level.
Hypothesis 2.1a. Nurses who hold direct care nurse manager roles will experience greater work-to-family conflict pressures than staff nurses.
Not supported: There is not a statistically significant difference between direct care managers and staff nurses and their levels of reported work-to-family conflict.

Hypothesis 2.1b. Nurses who hold direct care nurse manager roles will experience greater family-to-work conflict pressures than staff nurses.
Not supported: There is not a statistically significant difference between direct care managers and staff nurses and their levels of reported family-to-work conflict.

Hypothesis 2.2a. Nurses who hold nurse administrator/executive roles will experience greater work-to-family conflict pressures than staff nurses.
Supported: There is a statistically significant difference between nurse executives and staff nurses and their levels of reported work-to-family conflict. This comparison of means shows that administrators/executives experience greater WFC than their staff nurse counterparts.

Hypothesis 2.2b. Nurses who hold nurse administrator/executive roles will experience greater family-to-work conflict pressures than staff nurses.
Not supported: There is not a statistically significant difference between nurse executives and staff nurses and their levels of reported family-to-work conflict.

Chapter Summary

This chapter analyzed the study’s data, both descriptively and through tests of statistical significance. Analysis yielded many statistically significant results. Hypotheses were either supported or not supported based on the regression and ANOVA models and the corresponding levels of significance per variable.
CHAPTER FIVE: DISCUSSION AND CONCLUSION

The purpose of this study was to explore perceptions of work-and-family conflict among nurses, specifically nurses filling the roles of staff nurse, nurse manager, and nurse administrator/executive. This chapter discusses the study findings (demographics, work environment subscales, bivariate analysis and work-and family conflict results, and statistical testing) in light of prior research and the resulting implications of the study findings. This chapter will also report limitations of the study, policy implications, and recommendations for future research.

Implications of Study Findings

Demographics

When assessing the demographics of the study population, it is clear that the sample is predominately female. Only 9.2% of the population respondents were male. This is slightly lower than the statewide percentage of male registered nurses (11.1%) (FCN, 2016c). This has implications on the study results as females often view work-and-family issues differently from males (Colombo & Ghisleri, 2008).

Regarding race, almost 80% of the sample responded as white or Caucasian. This signifies a low respondent rate of ethnically diverse nurses. Additionally, this percentage of white nurses differs from statewide average; approximately 64.7% of the registered nurses in the state of Florida are white (FCN, 2016b), compared to almost 80% of those in this study.
The sample population age was also highest in the 50-59 year range (32%). This is a much higher percentage than other age ranges, demonstrating that the majority of nurses responding were not in their young, child-rearing years. This certainly holds implications for the study’s variables and outcomes when looking at things such as paid time off during childbirth and on-site childcare support at work. Additionally, this study’s average age range for nurses was higher than the state of Florida’s average age of registered nurses in practice: 47.5 (FCN, 2016c). This also holds implications when measuring work-and-family conflict, as an older population of nurses may not experience conflict levels as frequently as younger nurses (Grzywacz et al., 2006; Leineweber et al., 2013; Unruh et al., 2016; Yildrim & Aycan, 2008).

The majority (71%) of the sample was married. Nearly half of the survey respondents reported having no children living in the home (49.8%).

The primary practice setting selected by survey respondents was hospitals (55.2%). This indicates that the majority of nurses practiced in a work setting that was fast paced and high volume (Mullen, 2016). This is slightly lower than the state of Florida’s current percentage of nurses practicing in hospitals—63.5% (FCN, 2016c).

The most commonly reported role was that of staff nurse (61.2%), followed by nurse managers (8.6%) and then nurse administrators or executives (4.5%). Other nursing roles (e.g., nurse practitioners, nurse anesthetists, nurse midwives, educators, consultants, or other categories) made up 25.7% of the sample. By and large, most nurses in the sample were staff nurses, and this aligns with the Florida Center for Nursing’s statistics on staff nurses practicing across the state of Florida (68%) (FCN, 2016c). This indicated the sample had an accurate percentage of staff nurses represented, mirroring the state’s percentages of staff nurses.
The most commonly cited shift length was 8-11 hours (43% of respondents) followed by 12 hours (38% of respondents). This indicates that a majority of nurses worked longer than the typical 8-hour work day that many professionals in other industries follow.

The most commonly reported degree held by the sample was an equal representation between an associate’s degree and a bachelor’s degree (both 39.3%). This could be one reason why there were not many reported managers or administrators/executives in the sample (8.6% and 4.5%, respectively) as many of these roles may require a degree beyond the bachelor’s level. This demographic points to the need to encourage and financially support nurses to pursue advanced degrees in an effort to grow in knowledge and practice as well as to propel them into leadership positions.

The sample of nurses had been employed in their current workplace setting predominantly 1-3 years (31.9%), followed by less than 1 year (19.6%). However, the majority of the sample had been in the nursing profession for 13 years or more (59.7%). These findings indicate that nurses may not be new to the profession, but they are not hesitant to change practice settings when need be. This holds work environment implications as well.

The majority of nurses in this sample reported that their employer does not provide paid leave for childbirth (54.9%) nor do they provide on-site childcare support at work (88.9%). This may equate to workplace implications for those nurses with childbirth and/or childcare needs.

Work Environment Subscales

Five work environment practice scales were considered in this study: professional practice, nursing management, staffing resources, nurse/physician collaboration, and nursing competence. These scores were reported in Chapter Four. Nurses reported the “most present” areas of workforce support included nurse/physician collaboration, nursing competence
(orientation and preceptor programs), and nursing management support (i.e., a supportive supervisory staff). The remaining subscales were reported as the “least present” areas of workforce support; these included professional practice and adequate staffing resources subscales. The professional practice subscale included areas such as career development opportunities and active in-service and/or continuing education opportunities (Aiken & Patrician, 2000). The staffing and resources adequacy considered things like a satisfactory salary and enough nursing staff to provide quality care (Aiken & Patrician, 2000).

These findings hold implication for all nursing practice settings as they relate to nurses. First, health care leaders, managers and executives should be mindful of the need to improve the work environment in the needed areas. This includes providing adequate staffing resources so that quality care can be delivered consistently and seamlessly. Second, career development and professional development opportunities should be made available in order to support nurses in a healthy work environment.

It is in the best interest of managers and leaders to understand the impacts of this finding. Previous literature has proven that work environment characteristics such as proper organizational support go a long way in attempting to decrease work and family conflict (Camerino et al., 2010; Leineweber et al., 2013; Lembrechts et al., 2015; Unruh et al., 2016).

**Work-to-Family and Family-to-Work Conflict Scales**

Overall, nurses reported greater work-to-family conflict (mean value of 13.6) than family-to-work conflict (8.8). This is represented in Table 6. These findings indicate that nurses, on the whole, experience a greater conflict in the work domain (and thus impacting their family) than they experience in the family domain (impacting their work). This is in line with the work previously done by Takeuchi and Yamazaki (2010) and Burke and Greenglass (2001).
Bivariate Descriptive Analysis: Work and Family Conflict Among Study Variables

Work-family and family-work conflict scores for each explanatory variable were analyzed through a bivariate analysis.

Table 7 indicated these results. A general discussion on each variable follows. This was not a test of significance but rather an indication of work-family and family-work conflict scores across the study’s independent variables, as reported by the sample.

Gender

Females reported greater work-family conflict than males, but the reverse was true for family-work conflict; males reported a greater family-work conflict score. This indicates that, regarding gender, greater considerations need to be made to decrease the conflict felt by each gender. Males should continue to be studied, especially in a time of changing family dynamics.

Marital Status

Nurses who were married or indicated that they had a domestic partner reported slightly greater work-family conflict. However, the score was only slightly different from their non-married counterparts (a mean of 13.6 compared to 13.5, respectively). On the reverse, however, non-married nurses reported greater family-work conflict than work-to-family conflict. Previous literature indicates married nurses may experience decreased work-family conflict, compared to their non-married counterparts (Grzywacz et al., 2006). However, this sample reported the reverse: married nurses reported slightly higher work-family conflict.

Race

Looking at race—white nurses versus non-white nurses—it was evident that non-white nurses reported greater work-family and family-work conflict. For work-family conflict, scores
of white versus non-white nurses had means of 13.2 and 15.0, respectively. For family-work conflict, scores for white versus non-white nurses had means of 8.4 and 10.3, respectively. This holds significant implications for nurses of racial diversity in that non-white nurses, in this study, reported far greater conflict, in both directions, than their white counterparts.

Age

Although there was not a specific pattern of work-family and family-work scores distributed by age, it was apparent that nurses of all ages reported more work-family than family-work conflict. The age ranges with the highest reported work-family conflict were 40-49 years (mean score of 14.3), 70 or more years (mean score of 14.2) and less than 30 years (mean score of 14.0). The age ranges with the highest reported family-work conflict were 30-39 years (mean score of 9.5), 70 or more years (mean score of 9.5) and 60-69 years (mean score of 9.2). In sum, no real pattern was observed among nursing age and their accompanying conflict scores.

Number of Children Living in the Home

Nurses who responded with children living in the home reported greater work-family conflict than their counterparts who had no children living in the home. This is in line with previous research looking at this variable (Grzywacz et al., 2006; Unruh et al., 2016). Nurses with children in the home (either 1, 2, or 3+ children) reported nearly the exact same work-family score (means of 14.37, 14.32, and 14.30, respectively) indicating that increasing the number of children in the home did not necessarily increase the conflict score.

Conversely, nurses with children in the home also reported greater family-to-work conflict than their counterparts without children living in the home. Conflict scores for nurses with 1, 2, or 3+ children living in the home showed mean scores of 9.4, 9.2, and 9.1,
respectively. Again, this was in line with previous studies (Grzywacz et al., 2006; Unruh et al., 2016).

Over half of the study’s population reported having no children in the home. This most definitely influences the study’s outcomes on work-and-family conflict.

**Primary Practice Setting**

Interestingly, it was found that nurses, regardless of practice setting (hospital or non-hospital), reported the same level of work-family conflict (mean score of 13.6). This is also true for family-work conflict across all practice settings with a mean score of 8.8. This indicates that in this sample of nurses, both conflict types are inherent in the profession and not just specific to a workplace setting. This has implication for the need to support the nursing workforce—as a whole, and regardless of work setting—in these matters.

**Job Title**

Of the job titles represented—staff nurse, nurse manager, nurse administrator/executive, and “other”—it was evident that nurse administrators reported the highest work-family conflict (a mean score of 16.3) of all job titles. This was followed by nurse managers (mean score of 14.5), staff nurses (mean score of 13.6) and then “other” categories (12.8). This indicates that, for this particular sample of nurses, those in leadership and management roles reported greater work-family conflict than their non-management nursing counterparts.

Additionally, nurse administrators/executives reported the highest family-work conflict (mean score of 9.2), followed by “other” roles (mean score of 9.0) and then staff nurses (mean score of 8.8) and nurse managers (mean score of 8.1).

Due to the lacking nurse leadership studies in work-and-family conflict, no known studies are available with which to compare the above findings.
Shift Length

Nurses in the state of Florida work in varying shift lengths as this is not a regulated variable across the profession. For this particular sample, as nurses’ shifts increased in length, so too, did their reported work-family conflict scores. The shortest shift (less than 8 hours) resulted in a reported mean conflict score of 12.6. This trend was followed by shifts of 8-11 hours (and a mean score of 13.1), shifts of 12 hours (and a mean score of 13.8), and finally, shifts of greater than 12 hours (and a mean score of 15.8). These results align with previous literature findings (Leineweber et al., 2013; Pal, 2012) and hold noteworthy implications for employers and their shift length model. Nurses are likely to experience more work conflict on the job as their shifts increase in length.

An interesting trend was noted with reported shift length and family-work conflict. The shift with the highest reported conflict score in this area was less than 8 hours per shift, indicating that, for this sample, part-time shift work may be more difficult to juggle—in terms of competing family demands—than full time shifts. This reported family-work conflict score decreased as shift length increased: shifts 12 hours and shifts greater than 12 hours both had a reported mean conflict score of 8.9. Shifts 8-11 hours had the lowest reported family-work mean conflict score of 8.5.

Working Status

Nurses who indicated a part-time work status reported slightly less work-family conflict than nurses who indicated a full-time work status. These scores were reported as means of 13.2 and 13.7, respectively. Nurses working full-time reported a lower family-work conflict score than nurses working part time. These scores were reported as means of 8.6 and 9.6, respectively. This demonstrates that, for this sample of nurses, part time work was associated with higher
reported work-family conflict, but full-time work was associated with higher reported family-to-work conflict.

**Highest Degree Held**

Nurses reported their highest nursing degree held—associate’s, bachelor’s, graduate degree, or doctorate degree. Of these options, nurses who had only an associate’s degree reported the highest work-to-family conflict score (mean score of 14.2). For this particular sample, this score decreased with more advanced degrees. Those who reported a having a doctorate had the second highest work-family mean conflict score (13.8). This was followed by a graduate degree (mean score of 13.4) and then lastly, a bachelor’s degree (mean 13.1).

Conversely, regarding family-work conflict, nurses who indicated they had a doctorate degree reported the least amount of family-work conflict (with a mean score of 7.5). This reported score increased with an associate’s degree (with a mean of 8.5) and then with each subsequent level of degree attainment. Bachelor’s degree holders reported a family-work conflict score of 8.7; the highest score of 9.8 was reported by nurses holding graduate degrees.

**Tenure in the Workplace**

There was not a significant pattern reported in work-family or family-work conflict scores related to a nurse’s length of employment in their current workplace setting. Those who reported working in their current setting for less than a year had a mean conflict score of 13.1. Those who reported working in their current setting for 1-3 years or 4-6 years had a mean conflict score of 14.1 and 14.5, respectively. These three scores confirm that work-family conflict, for this sample, increased as nurses advanced in their workplace setting tenure. A decrease in work-family conflict scores was reported as nurses’ tenure in their current workplace increased to 7-9 years (with a mean score of 12.0) and 10-12 years (with a mean score of 12.4).
Finally, the conflict was reported to increase again as nurses reached professional tenure in their current workplace setting of 13+ years.

Similarly, there was not a significant pattern reported in family-to-work conflict scores seen in nurses’ length of employment in their current workplace. The lowest score was reported in the employment range of 7-9 years (with a mean score of 7.2). This reported score increased to 8.3 in the 10-12 year range of workplace setting employment, followed by a score of 8.4 in the 4-6 year range of current workplace setting employment. The highest family-work conflict score was reported in nurses who had worked in their current workplace setting for 1-3 years (with a mean score of 9.4).

**Tenure in the Profession**

There was also not a significant pattern seen in the reported work-family and family-work conflict scores and nurses’ lengths of employment in the profession altogether. For this sample, nurses who worked in the profession for 7-9 years reported the lowest work-family conflict (with a mean score of 11.9), followed by those who had been employed in the profession for less than 1 year (with a mean score of 13.3) and those who had been employed in the profession for 10-12 years (with a mean score of 13.5). Those who had been employed in the profession for 4-6 years reported the highest work-family conflict at a mean score of 15.0. These findings also mimic the above findings related to tenure in the workplace setting: the lowest reported work-family conflict score was seen in 7-9 years both in the workplace and in the profession. The highest reported work-family conflict score was seen in nurses employed for 4-6 years, both in the current workplace and in the profession.

When assessing family-work conflict and nurses’ professional tenure, those who reported the lowest conflict had been employed in the profession for 7-9 years (with a mean score of 7.9).
This was followed by nurses working in the profession for 13+ years (with a mean score of 8.62) and then 10-12 years (with a mean score of 8.64). Those with the highest reported family-work conflict corresponded with nurses who had worked in the profession for 4-6 years (with a mean score of 10.2).

**Employer Support for Childcare**

Nurses who indicated having on-site childcare support at work reported a lower work-family conflict score (mean of 13.3) compared to those nurses who did not report having on-site childcare support at work (with a mean score of 13.6). There was not a large difference noted between these two conflict scores.

Nurses who indicated having on-site childcare support at work also reported a lower family-work conflict score (mean of 8.3) compared to those nurses who did not report having on-site childcare support at work (with a mean score of 8.9). Again, there was not a large difference noted between these two conflict scores.

**Employer Support for Paid Childbirth Leave**

Nurses who indicated working for an employer who provided paid leave for childbirth also reported a lower work-family conflict score (mean of 13.4) compared to those nurses who did not report having an employer who provided paid leave for childbirth (with a mean score of 13.7). There was also not a large difference between these two conflict scores.

Nurses who indicated working for an employer who provided paid leave for childbirth also reported a lower family-work conflict score (mean of 8.8) compared to those nurses who did not report having an employer who provided paid leave for childbirth (with a mean score of 8.9). Again, no real difference was observed.
Multiple Regression and ANOVA Analyses

Hypothesis testing occurred for a number of variables in two separate regression models and an ANOVA model. One regression model assessed work-family conflict; a second model assessed family-work conflict. ANOVA assessed the statistical difference of work-and-family conflict means between nursing roles. The results were reported in Chapter Four, but a discussion follows below.

Significant Predictors

In both regression models—work-family and family-work—race was noted as a statistically significant variable. This revealed that non-white nurses had more conflict, in both domains, than their white counterparts. This finding aligns with previous studies on work-and-family conflict and race (Gipson-Jones, 2009; Grzywacz et al., 2006).

This holds implications for employers, leaders, and policymakers at large. Much more effort needs to be made on the part of health care leaders to eliminate racial disparities on the job. Employers must take greater care to ensure nurses of all racial and ethnic backgrounds are supported appropriately while on the job. This is an area that will continue to prove important to study as our world faces disparities among races in multiple workplace settings.

This study found shift length as a significant variable impacting work-family conflict. As shifts increase in length, so too does work-family conflict. This finding confirms the findings from many other studies (Camerino et al., 2010; Fujimoto et al., 2008; Grzywacz et al., 2006; Simon et al., 2004; Yildirim & Aycan, 2008).

Nurse leaders and health care executives should consider this finding and determine how shift length might be impacting their nurses. Employers might prefer 12-hour shifts as a way to promote fewer “hand overs” and thereby increase organizational efficiencies (Griffiths et al.,
Regarding nurses, their opinions vary on working long shifts. Some prefer the longer shifts in an effort to work fewer days per week (Griffiths et al., 2014), while others do not, citing that quality suffers with long (12 hours) shifts (Kalisch, Begeny, & Anderson, 2008). In the very least, shifts should not exceed 12 hours, as it is clear these shifts negatively impact work-family conflict.

Paid leave for childbirth was found to be a significant variable impacting family-work conflict. As employers provided paid leave for childbirth, nurses felt fewer family issues impacting the work domain. This finding seems intuitive and suggests to employers that supporting the nursing workforce through paid leave for childbirth is significant.

In the work-to-family conflict regression model, nurses who practiced in the nurse manager or nurse executive role had greater work-to-family conflict compared to their staff nurse counterparts. This finding is likely the first of its kind and holds incredible implication for the profession at large. Staff nurses could be reluctant to fill open manager/executive roles simply because of the increased conflict that comes with the role. This connection of nursing role and work-family conflict deserves worthy attention as nurses grow in their roles and in the profession at large. Policy implications surrounding this finding are discussed later.

In the ANOVA model, a significant difference was noted among the work-family conflict score of staff nurses and administrators, noting staff nurses had statistically significantly less conflict than administrator/executive nurses. The difference in means between these groups is worth noting as it, again, holds leadership implications.

**Non-Significant Predictors**

Gender was not identified as a statistically significant variable in the regression model for either work-family or family-work conflict. This result was also seen in some previous studies
(Simon et al., 2004) but then conflicted with other studies (Rochlen et al., 2009; Leineweber et al., 2013). This indicates more research is needed in this area, especially with changing social and familial dynamics.

Age was not identified as a statistically significant variable in the regression model for either work-family or family work conflict. This is counter to what other literature has concluded in previous studies (Grzywacz et al., 2006; Leineweber et al., 2013; Yildrim & Aycan, 2008). It is possible that the mean age of this study’s sample size (which was greater than the mean age of RNs practicing in the state of Florida) impacted the study results in this way.

In this study, there was no statistical difference in work-family or family-work conflict regarding marital status. Those married (or with a domestic partner) did not statistically differ in conflict compared to their non-married counterparts. The same can be said for having a child or children in the home. These findings conflict with previous studies (Farhadi et al., 2013; Grzywacz et al., 2006). Any number of variables from the study (age, gender) or those not assessed (supportive family structures) could have impacted the study and led to this outcome. Additional research is needed in this area to provide consistency among literature findings.

There was also no significant difference for the variable “practice setting” indicating that conflict levels were not statistically different within varying health care settings. This finding is in contrast to Grzywacz et al. (2006) in which nurses in acute care settings were found to have greater work-family conflict than nurses who practice in hospital settings. However, this variable has not been studied sufficiently and more research is needed in this area.

The study assessed the length of employment in the nurses’ current setting and in the profession at large. Neither variable showed statistical significance as an indicator for family-work or work-family conflict. This suggests that nurses who remain in the job or profession may
not experience more or less conflict in either domain due to tenure alone. Additional research is needed to better assess variables such as tenure on the job and tenure in the profession and whether these variables impact work-and-family conflict.

Although shift length was statistically significant in the work-family conflict regression model, it was not a significant variable in the family-work conflict model. This indicates that regardless of hours worked within a shift, nurses did not feel that contributed to conflict in the family domain impacting the work domain.

For both work-family and family-work conflict, on site childcare support was not a statistically significant variable. This was in contrast to previous findings in other studies (Takeuchi & Yamazaki, 2010). The absence of childcare support in the workplace has been previously shown to increase family-to-work conflict in a number of studies (Estryn-Béhar & van der Heijden, 2012; AlAzzam et al., 2017). However, it is possible that the sample, sample mean age, or other variables impacted this outcome specifically. As such, this variable and its connection to work-family and family-work conflict should be reviewed in future studies.

Paid leave for childbirth was not significant for the work-family conflict model. (As noted above, it was significant for family-work conflict model). However, regarding work-family, it was not determined that this variable significantly impacted nurses’ conflict scores. This variable deserves greater attention in future research, as other studies have proved that supportive workplace structures such as paid childbirth leave decrease conflict levels and increase workplace satisfaction (Takeuchi & Yamazaki, 2010).

Of the five nursing work environment subscales analyzed, none showed statistical significance. This finding was rather surprising; in the past, several studies have noted correlations between work environment characteristics and increased work-and-family conflict.
levels (Camerino et al., 2008; Leineweber et al., 2013; Lembrechts et al., 2015; Unruh, et al., 2016). Further, for those subscales that were noted as “least present” in a nurses’ work environment (i.e., professional practice support and adequacy of staffing and resources), it was assumed that these would correlate with increased conflict levels, but that was not the case. It is possible that due to the wide variety of nurse roles, not all subscale themes were applicable. Additional research is needed to evaluate these work environment scale and their impacts on work-and-family conflict levels.

**Limitations**

All research comes with limitations, and this study is no different. First, this study collected data solely through survey research. Research studies that incorporate data collection through surveys contain inherent restrictions. Surveys rely on self-reported responses from the sample. Self-reported responses can be limited to varying and differing perspectives, question misinterpretation, or overall incorrect selection. Even though this was a randomized sample, respondents of survey research may often represent a sample that wants their voice heard and therefore have specific issues not consistent with the profession at large. The opposite could be true as well; those whose voice should be heard may not participate in survey research for fear of anonymity issues or, worse, retribution.

Second, although over 400 nurses participated in this study’s survey, the response rate was low—9%. An increased sample size would have been ideal to garner more robust results from a greater percentage of nurses. Further, this study would have been more robust if more nurses filling leadership roles—managers and administrators/executives—would have participated at a greater rate. A larger study sample size would increase generalizability to the
greater population. Unfortunately, collecting data through surveys proves difficult, as nurses are often over-surveyed in their job.

Third, this study attempted to gather data on nurses practicing in the state of Florida. However, representation across different variables (age, race, or gender, for example) did not always align with the statewide representation on these variables. For example, 80% of this study’s respondents identified as “white,” which presented a predominantly white dominated population. However, in the state of Florida, white nurses account for 64% of the state’s nurses (FCN, 2016b). These differences in study representation could skew the sample and indicate differences in outcomes, inhibiting generalizability to the larger nursing population.

**Theoretical Implications**

The framework used to guide this study was the Role Strain theory. The findings of this study reinforce this theory. This study proved that personal and professional domains lead to role strain for nurses, and thus, result in increased work-family and family-work conflict levels. This was confirmed in the personal domain through demographics such as race. This was also confirmed in the professional domain through work setting variables such as shift length and paid leave for childcare. Lastly, this was confirmed in both personal and professional domains when assessing demographics such as nursing role: staff nurse, nurse manager, or nursing executive. As nurses juggle competing personal and professional demands, role strain occurs, and work-and-family conflict increases.

**Policy Implications**

This study resulted in a number of policy implications worthy of consideration. Nurse managers, administrators/executives, and health care leaders in general would benefit from
understanding the results of this study and the impacts of such results both organizationally and professionally.

Policy implications exist internally, at the organizational level, and externally, at the system, state, or national level. As this study concluded, nurses in management or executive roles experience greater work-to-family conflict than nurses who practice in traditional roles. This finding holds managerial implications as well. If nurses are called to step into leadership roles (IOM, 2010), the increased conflict experienced in these roles could be a deterrent for future nurse leaders. It is crucial that the nursing workforce address this and continue offering supportive structures for nurses in all roles, including nurse managers and executives.

The Institute of Medicine also had recommendations, related to future nurse leadership, that have impact on this topic. To revisit the recommendations from the Institute of Medicine (2010), consider the following:

*Recommendation 1*: Nurses should practice to the full extent of their education and training;

*Recommendation 2*: Nurses should achieve higher levels of education and training through an improved education system that promotes seamless academic progression;

*Recommendation 3*: Nurses should pursue full partnership status with physicians and other health care professionals.

In response to Recommendation 1, it is important to consider the voice of nurse managers and executives. Although this study did not address this recommendation specifically, the study did assess work-and-family conflict levels in nurse managers and executives. It was found that nurses in managerial or executive roles experience an increase in work-family conflict compared to their non-managerial counterparts. This could be a huge deterrent for staff nurses who may be
capable of leadership but do not want to experience the increased levels of conflict. Given the current climate of the profession, nurses might be content to remain practicing at the bedside, even though they hold an advanced degree.

In response to Recommendation 2, this sample showed an increase in work-and-family conflict levels as the sample progressed in their education, specifically from the bachelor’s level to the master’s level, and finally, the doctoral level. Through bivariate analysis, it was noted that nurses’ work-family conflict levels increase as their education attainment increases. This should be considered and addressed so that the nursing profession at large can benefit from nurses with advanced training.

In response to Recommendation 3, health executives and administrators should continue to identify ways to increase the collaborative relationship between nurses and physicians. On the work environment scale, this area was reported as “most present” in the workplace. This means that nurses from this sample are, fortunately, reporting collaboration is successfully occurring with physicians across clinical settings.

Further, policy attention should be given to key variables of this study: race, shift length, and paid leave for childbirth. Non-white nurses experienced significantly greater work-family and family-work conflict. As such, health care leaders should continue assessing and addressing this issue; nurses of all races should practice in environments that do not lead to increased work-family conflict. Starting focus groups or giving nurses (especially non-white nurses) a voice to speak up about issues in the profession is important.

Additionally, shift length was a statistically significant variable, indicating longer shift lengths negatively impact conflict scores. Leaders need to address this finding so that their
nurses and workplaces (and, thus, patients) are cared for and safe. Implementing things like increased breaks within the shift or the option to work shorter shifts should be considered.

Health care organizations should also consider offering consistent family support structures. This can be implemented through “paid leave for childbirth” as one such way to decrease family-to-work conflict. One gesture in this way can go a long way in decreasing the family-to-work conflict for the nursing profession.

Lastly, policy implications exist both internally and externally, related to nursing role. The nursing profession should continue developing skilled leaders to advance the profession. A healthy work environment (and one with reduced work and family conflict levels) requires strong nursing leadership in which leaders are engaged with staff nurses (Sherman & Pross, 2010). Regarding stress reduction, nurse leaders should also acquaint nurses with stress management skills and problem-solving techniques, as a way to manage the work family conflict (Chiang & Chang, 2012). Ultimately, these tactics will not only reduce work and family conflict but also decrease overall job conflict and turnover, which are all results of this conflict (Unruh et al., 2016).

**Recommendations for Future Research**

Additional research should continue to be conducted regarding work-and-family conflict. Specifically, a national study should occur looking at nurses and the profession, nationwide. The collective voice of the nursing profession deserves to be heard. Work-and-family conflict should continue to be explored across all variables of this study, including age, race, gender, race, ethnicity, marital status, and children in the home. As our societal demographics change, it is imperative we continue to study the profession’s changing demographics, most specifically race and ethnicity.
In addition, nurse managers and executives should continue to be assessed so that the profession can better understand their needs. Without hearing from this population, the profession will continue to suffer and leadership roles may go unfilled.

**Conclusions**

This study examined the perceptions of work and family conflict among acute care staff nurses, direct care nurse managers, and nurse executives in the state of Florida. Through survey data collection and a compilation of questions related to demographics, work environment characteristics and perceptions, and work and family conflict, a number of conclusions were drawn.

It was found that nurses who practice in the nurse manager or nurse executive roles experience greater work-to-family conflict than their counterparts of bedside nurses. Additionally, nurses who are non-white experience greater work-family and family-work conflict than their white counterparts. Shift length was also found to be a significant variable impacting work-family conflict: the longer the shift, the greater the conflict experience by the nurse. Finally, the availability of paid leave for childbirth significantly decreased a nurse’s family-to-work conflict.

These findings point to a number of critical issues within the profession. In an effort to give voice to nurses who practice in a variety of roles, health care leaders need to continue assessing work environment needs and work-and-family issues to in order to better equip the profession for practice and the overall greater good.
APPENDIX A: DEMOGRAPHIC QUESTIONS
1) Select your **Gender**: Male or Female
2) Select your **Race**: White; Black/African American; American Indian/Alaskan Native; Asian; Native Hawaiian/Pacific Islander; Other
3) Select your **Age**, in years:
   - <30; 30-39; 40-49; 50-59; 60-69; 70 and over
4) Select your **Marital Status**: Single; married/domestic partner; divorced; widowed
5) Select the number of **Children** you have living in your home: 0; 1; 2; 3+
6) Select your **highest Nursing Degree held**: Associates; Bachelor’s; Graduate; Doctorate; Other
7) Select your **working Status**: Not currently working, Full-time or Part-time
8) Select the **number of years employed in your current setting**: < 1 year; 1-3 years; 4-6 years; 7-9 years; 10-12 years; 13+ years
9) Select the **number of years employed in nursing altogether**: < 1 year; 1-3 years; 4-6 years; 7-9 years; 10-12 years; 13+ years
10) Select your **regular shift length**: < 8 hours per shift; 8-11 hours per shift; 12 hours per shift; 12+ hours per shift
11) Select your primary **Practice setting**: hospital, ambulatory care (including medical/physician practices); public/community health, home health, academic education; nursing home/extended care; other
12) Select your current **job title**: staff nurse; nurse manager; administrator or executive; nurse practitioner; nurse anesthetist; nurse midwife; patient coordinator; clinical nurse specialist; instruction/academic; consultant; researcher; informatics; other
13) Does your employer provide onsite **childcare support at work**: Yes or No
14) Does your employer provide **paid leave for childbirth**: Yes or No
APPENDIX B: PERCEIVED NURSING WORK ENVIRONMENT SCALE
For each item in this section, please indicate the extent to which you agree that the following items are present in your current job. Indicate your degree of agreement by selecting the appropriate response.
Likert scale responses: Strongly Agree, Somewhat Agree, Somewhat Disagree, Strongly Disagree

The professional practice subscale:
Active in-service/continuing education programs for nurses
Career development/clinical ladder opportunity
Opportunity for staff nurses to participate in policy decisions
Support for new and innovative ideas about patient care
Clinical nurse specialists who provide patient care consultation
A chief nursing executive is equal in power and authority to other top-level hospital executives
Opportunities for advancement
Nursing staff is supported in pursuing degrees in nursing
An administration that listens and responds to employee concerns
An active quality-assurance program
Staff nurses are involved in the internal governance of the hospital (e.g. policy committees)
Staff nurses have the opportunity to serve on hospital and nursing committees
The contributions that nurses make to patient care are publicly acknowledged

The nursing management subscale:
A supervisory staff that is supportive of nurses
A nurse manager who is a good manager and leader.
Praise and recognition for a job well done
A nurse manager backs up the nursing staffing decision making, even if the conflict is with a physician
Nurse managers consult with staff on daily problems and procedures

The staffing and resources adequacy subscale:
Adequate support services allow me to spend time with my patients
A satisfactory salary
Enough time and opportunity to discuss patient care problems with other nurses
Enough registered nurses on staff to provide quality patient care.
Enough staff to get the work done

The nurse/physician collaboration subscale:
Physicians and nurses have good working relationships
Much teamwork between nurses and doctors
Physicians give high-quality medical care
Collaboration (joint practice) between nurses and physicians

The nursing competence subscale:
A good orientation program for newly employed nurses
Working with nurses who are clinically competent
A preceptor program for newly hired RNs
Standardized policies, procedures and ways of doing things
Floating, so that staffing is equalized among units
Working with experienced nurses who "know" the hospital
APPENDIX C: WORK AND FAMILY CONFLICT SCALES
Survey question: “How true is this for you?”
Likert scale responses: Very true, Somewhat true, Somewhat untrue Very untrue
Work-Family Conflict Scale
1. The demands of my work interfere with my home and family life.
2. The amount of time my job takes up makes it difficult to fulfill family responsibilities.
3. Things I want to do at home do not get done because of the demands my job puts on me.
4. My job produces strain that makes it difficult to fulfill family duties.
5. Due to work-related duties, I have to make changes to my plans for family activities.

Family-Work Conflict Scale
1. The demands of my family or spouse/partner interfere with work-related activities.
2. I have to put off doing things at work because of demands on my time at home.
3. Things I want to do at work don't get done because of the demands of my family or spouse/partner.
4. My home life interferes with my responsibilities at work such as getting to work on time, accomplishing daily tasks, and working overtime.
5. Family-related strain interferes with my ability to perform job-related duties.
Approval of Exempt Human Research

From: UCF Institutional Review Board #1
FWA00000351, IRB00001138

To: Amanda Diane Raffaenuad

Date: July 21, 2017

Dear Researcher:

On 07/21/2017, the IRB approved the following activity as human participant research that is exempt from regulation:

Type of Review: Exempt Determination
Project Title: Work and Family Conflict: A Comparative Analysis Among Registered Nurses, Registered Nurse Managers, and Nurse Executives
Investigator: Amanda Diane Raffaenuad
IRB Number: SBE-17-13216
Funding Agency: SBE-17-13216
Research ID: SBE-17-13216

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in IRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

[Signature]

Signature applied by Renas C. Carver on 07/21/2017 12:58:54 PM EDT

IRB Coordinator
APPENDIX E: INFORMED CONSENT
Title of Project: Work and Family Conflict: A Comparative Analysis Among Registered Nurses, Registered Nurse Managers, and Nurse Executives

Principal Investigator: Amanda Raffenaud (doctoral student)

Faculty Supervisor: Lynn Unruh, PhD

You are being invited to take part in a research study. Whether you take part is up to you.

The first purpose of this study is to describe the perceptions of work and family conflict among acute care RNs, direct care RN managers, and nurse executives in the state of Florida. The second purpose is to assess whether there is a difference in perceptions of work-family/family-work conflict between registered nurses, direct care nurse managers, and nurse executives. The third purpose is to assess personal and work environment factors that contribute to perceptions of work and family conflict among varying nurse roles.

Each participant will be asked to answer work environment related questions distributed through an email questionnaire (using Qualtrics). Participants will not be asked to provide any personal identifying information such as name, date of birth or social security number. Participant responses will be anonymous and confidential. If an individual chooses not to participate in the survey, they are free to refuse.

The participant’s participation will only require completion of email survey or no more than 30 minutes of their time (answering less than 60 questions, mostly via likert scale ratings). No face-to-face participation is needed.

You must be 18 years of age or older to take part in this research study.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints Amanda Raffenaud, Doctoral Student, Public Affairs Program, College of Health and Public Affairs, by email at Amanda.Raffenaud@knights.ucf.edu or Dr. Lynn Unruh, Faculty Supervisor, Department of Health Management and Informatics by email at Lynn.Unruh@ucf.edu

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of
the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.
APPENDIX F: EMAIL TO SURVEY PARTICIPANTS
Dear Registered Nurse,

You are being invited to take part in an important survey of around 5,000 RNs in the state of Florida. This study, entitled “Work and Family Conflict: A Comparative Analysis Among Registered Nurses, Registered Nurse Managers, and Nurse Executives” is being conducted by researchers at the University of Central Florida (UCF).

Very little is known about nurses’ conflicting demands of work and family, specifically those who practice in the state of Florida. By participating in this survey, your important voice will shed light on these topics so that we can better understand the family and work environment needs of registered nurses, nurse managers, and nurse executives.

This survey should take no more than 30 minutes to complete. Your responses are very important, and your participation is voluntary. You do not have to answer any questions you do not wish to, and there are no expected risks for taking part in this study. Your responses will be kept confidential. You will NOT be asked to provide any personal identifying information such as name, date of birth, or social security number. Your responses will be anonymous and confidential. If you choose not to participate in the survey, you are free to refuse.

Thank you for your participation. Your voice as an RN matters, and through this important study, you will be heard!

Follow this link to the Survey:  ${l://SurveyLink?d=Take the Survey}
Or copy and paste the URL below into your internet browser:  ${l://SurveyURL}

Please note: you must be 18 years of age or older to take part in this research study.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints Amanda Raffenaud, Doctoral Student, Public Affairs Program, College of Health and Public Affairs, by email at Amanda.Raffenaud@knights.ucf.edu or Dr. Lynn Unruh, Faculty Supervisor, Department of Health Management and Informatics by email at Lynn.Unruh@ucf.edu

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.


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Stimpfel, A. W., Sloane, D. M., & Aiken, L. H. (2012). The longer the shifts for hospital nurses, the higher the levels of burnout and patient dissatisfaction. *Health Affairs*, 31(11), 2501–2509.


