

**A MULTIFACETED VIEW OF CAREER CHOICE AND WORK OUTCOMES OF  
NURSES IN HEALTHCARE**

By

IFEYIMIKA OLUWADAMILOLA OGUNYOMI

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Supervising committee:

Myrtle P. Bell, Ph.D. (Chair)

Wendy J. Casper, Ph.D.

Maxine A. Adegbola, Ph.D. (External member)

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Before they call, I will answer;

while they are still speaking, I will hear.

Isaiah 65:24

## Abstract

A Multifaceted View of Career Choice and Work Outcomes of Nurses in Healthcare

Ifeyimika O. Ogunyomi

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Supervising Professor: Myrtle P. Bell

Turnover among new nurses is rampant within the health care industry and generated significant costs for organizations and the nursing profession. The overall aim of this dissertation is to understand the career choice motivations of nurses through a framework that link initial choice motives with eventual turnover intent. A broader management understanding of the experiences and attitudes of nurses in various situations will inform healthcare organizations as to the performance management strategies to develop for employee retention. I address this by exploring pertinent situations in the nursing work environment across three essays, which incorporate qualitative and quantitative research methods. The first two essays focus on the work experiences and behavioral reactions of new nurses in the workplace. The third essay considers the importance and benefits of organizational efficacy at the individual level of analysis.

*Keywords: career choice motives, COVID-19, new nurses, healthcare, social cognitive career theory, autonomy, organizational efficacy, commitment, self-efficacy.*

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## Dedication

To George and Janet Ogunyomi, my helicopter parents and I would not have it any other way. I am as proud to be your child as you are of me.

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## **Chapter 1: Introduction**

About four million people, specifically 3.8 million, in the United States are nurses (Smiley et al., 2018) making them the largest group of health care workers (HCWs). Globally, nurses and midwives account for close to 59% of the health care workforce (WHO, 2020a). Due to their sheer size and ascribed functions, nurses are the most responsible HCWs for the general health and well-being of patients (Sharma et al., 2016). On a macro perspective, nurses bear greater responsibility for public health compared to other HCWs. Compared to other professions, the demand for nurses is much higher (U.S. Bureau of Labor Statistics, 2019). Recent estimates indicate the demand for nurses in the US will rise by at least 15% between 2016 and 2026 with an additional 200,000 RNs needed to replace those retiring out of the profession (American Association of Colleges of Nursing (AACN), 2019).

In the past year, the significance of nurses was further highlighted by two occurrences. The first was the declaration of 2020 as the “Year of the Nurse” (WHO, 2020b). However, before events in recognition of nurses could take place, the COVID-19 pandemic struck causing a drastic shift in society. COVID-19 is a deadly virus with suspected origins in the Wuhan province of China. The rapid spread of the coronavirus across the globe necessitated that HCWs, especially nurses, attend to the public health (De Kock et al., 2020; Zhang et al., 2020). This has further stirred the long overdue and well-deserved public appreciation of nurses (Mo et al., 2020).

The uptick in the recognition of the role of nurses in health care infers the timeliness of discussion on the shortage of nurses across the globe (Buerhaus et al., 2009; McLaughlin et al., 2010; Price, 2009; Takase et al., 2009). The reasons for the current nursing shortage fall under three themes. One, studies cite a decrease in the entry of students into nursing education

(Borkowski et al., 2007). Low entrants are due in part to an insufficient number of nursing educators to meet the capacity necessary for nursing programs to enroll more students (American Association of Colleges of Nursing (AACN), 2019). Two, high professional turnover among nurses further worsens the nursing shortage (Hayes et al., 2006). Turnover is highest among new graduate nurses who leave because of their inability to cope with the demands (and perceived misalignment between their expectations and reality) of the nursing work environment during their transition from nursing education to practice (Aiken et al., 2001; Hodges et al., 2005; Mills & Mullins, 2008). The term ‘new nurses’ typically refers to individuals with no more than two or three years of nursing work experience post-college education (Duchscher, 2008). Third, retained nurses face higher workloads due to the staffing shortage which causes dissatisfaction and leads to further turnover (Buerhaus et al., 2007; Buerhaus et al., 2017; Tai et al., 1998).

The consequences of the nursing shortage to organizational and employee performance outcomes provide a continuous justification for the study and identification of useful information on the determinants of nurse turnover. Scholars highlight the need to develop highly effective human resource practices that can be used to ensure patient safety and quality of care by retaining a highly qualified workforce of nurses (Eaton, 2000; West et al., 2006). According to Hayes et al. (2006), nursing turnover encompasses different employee actions ranging from leaving a job or specific organization (job or organizational turnover) to leaving the profession entirely (professional or occupational turnover). The detrimental effects of organizational turnover are mainly financial. Organization’s turnover costs include lost productivity, decline in employee morale, and the cost of recruiting and training new hires to expected standards (Chandler, 2012; Jones & Gates, 2007). Organizations may also incur costs from lawsuits due to errors by an overworked nurse staff (Lang, 2001). The main costs of turnover to the nursing

profession are the impacts to the safety of patients' lives and those in society, particularly the rapidly ageing population (Beurhaus et al., 2017; Buchan & Aiken, 2008). Patient safety concerns arise because of the knowledge and skills gap between the revolving recruits of new nurses and more experienced nurses that have remained in the profession for a long time (Hayes et al., 2012; O'Brien-Pallas et al., 2006; Sandler, 2018). To both organizations and the nursing profession, turnover raises the likelihood of unwanted incidents such as increased patient infection in hospitals, higher readmission rates, and increased patient mortality (Aiken et al., 2002; Cimiotti et al., 2012; Tubbs-Cooley et al., 2013). Hence, the concern for patient safety as a result of staff turnover has risen across the globe (Welp et al., 2015).

As previously stated, studies have found that turnover among new nurses is one of the most significant sources of the nursing shortage. New nurses within their few years in nursing practice are more vulnerable to turnover due to negative work experiences and have been known to have shorter tenure both in health care organizations and the nursing profession overall (Barron & West, 2005; Flinkman et al., 2008). Professional turnover rates of new nurses range from lower conservative numbers of six percent (Scott et al., 2008) to moderate statistics of 10-15% (Rudman et al., 2010) to higher rates of up to 60% (Aiken et al., 2001; Duchscher & Cowin, 2004). As these nurses leave within the period of transition from nursing education to practice, research calls for a better understanding of the mechanisms at play during this period (Higgins et al., 2010), to better manage turnover. In addition to understanding why former nurses left the profession, it is also necessary to understand what contributes to turnover intentions given that they precede and accurately predict employee turnover (Hom et al., 1992; Mobley et al., 1978; Parry, 2008). Aside from a few exceptions (Russo & Buonocore, 2012; Russo et al., 2015; Woolnough et al., 2019), a management discipline approach to nurse turnover is underutilized

(Koopman et al., 2019; Wu et al., 2019). Hence, there have been calls citing the importance of human resource management and organizational behavior research in nursing (Harms & Lowman, 2020; Zhu et al., 2020).

For management research to contribute to the extant nursing research, a clear picture of the nursing profession and work environment is necessary. Nursing can be classified as a high-risk occupation, a term used to describe professions that involve a higher-than-normal exposure to risks and dangers including death (Russell, 2011). Most high-risk occupations involve public service. Some other examples of high-risk occupations are firefighters, police, pilots and flight attendants, and social workers. Research on high-risk occupations in management is scarce, with a few exceptions (Johnson & Kennedy, 2010; Russell, 2011; 2014; Russell & Cole, 2017; Russell et al., 2014) and there is none framing nursing as a high-risk profession.

In high-risk occupations like nursing, employees are prone to face certain job stressors more frequently than those in other occupations. For instance, the experience of workplace violence, bullying, and incivility is higher for nurses compared to other occupations (Edmonson & Zelonka, 2019; Johnson, 2018). Nurses also encounter ethical dilemmas and the inability to provide required care for patients due to the struggle between organizational demands and expectations for resource allocation, and patient needs (Dierckx de Casterle', 2008; Haahr et al., 2020; Rainer et al., 2018). Lastly, nurses sometimes care for sick patients with highly transmittable illnesses such as COVID-19 and Ebola, and HIV/AIDS, to mention a few from the current millennium.

Over the years, a substantial amount of qualitative and quantitative studies has been dedicated to understanding how certain characteristics of the nursing work environment such as leadership styles and coworker and supervisor support enhance nurses' experiences in their job

and improve retention rates. Other studies devoted to understanding the nature of work demands and resources for nurses suggest that improvements be made to nurses' job design incorporating elements pioneered by Hackman and Oldham (1976). In many of these studies, the proper framing of the nursing context with the applied theory is lacking. Also, some of the studies only provide a descriptive investigation of work stressors and turnover. Recent calls suggest that management perspective is missing in nursing research beyond the use of nurses and other HCWs as study samples (Harms & Lowman, 2020). In a unique occupation like nursing, interpretations of one's work experiences may rely on innate factors that are not typically conceptualized in turnover research. Hence, a different approach and framing of nursing to address management issues is imperative.

The purpose of this dissertation is to understand how nursing career choice and decisions are made. My focus in this research is two-fold, combining an investigation of early-stage career choices with decisions impacted by individuals' work experiences. First, I seek to understand how initial career choice motives contribute to nurses' work attitudes, perception of their work environment, and behavioral intentions. Second, I explore individual-level antecedents and outcomes of organizational variables among nurses as they adapt to their new work environment. Often, management research on performance management is focused on motivating extra-role behaviors which are non-mandated employee actions directed towards one's coworkers (peers), supervisors, or the overall organization, and benefit the target of the behavior positively (McNeely & Meglino, 1994; Podsakoff et al., 2000). Studies have found that performance of extra-role performance is grounded on employee's felt obligation to act favorably towards an organization that they feel values them (Eisenberger et al., 2001; Herda & Lavelle, 2011; Williams & Anderson, 1991). In comparison, I focus on the most significant and widely-

researched outcome in nursing, turnover. Organizational and professional turnover persist within the nursing profession, hence there is justification for extensive and continuous understanding of the issue. Although I do not directly study turnover, I investigate turnover intention, which has been shown to be a strong and accurate predictor of actual turnover (Hom et al., 1992; Mobley et al., 1978; Parry, 2008).

The research offers multiple contributions to research and practice. First, to my knowledge, no other study has framed nursing as a high-risk occupation in investigating vital work attitudes and outcomes of the profession. There are unique challenges present in high-risk occupations (Russell, 2011). Only a handful of research have investigated work experiences and outcomes of individuals in high-risk occupations (Kennedy & Johnson, 2010; Russell and colleagues; 2011; 2014; 2017) and those studies were limited to samples of police officers and military personnel. The nursing occupation has often been viewed through the perspective of calling which assumes mostly positive outcomes for individuals working as nurses. Framing nursing as a high-risk profession, along with being a helping profession, enables researchers to account for the dangers and unpleasant experiences nurses encounter while also recognizing the positive mission and impacts of the profession. Understanding the high-risk features of nursing also broadens research understanding on the causes of high turnover and declining interest in the career. This assumption and logical conclusion, then set a foundation for examining motive among those who choose to perform dangerous and risky occupation. Further, it facilitates the investigation of the existent psychological boundaries of individuals in the performance of their jobs and the thresholds they have for risk.

Furthermore, I contribute to growing research on the transition and experiences of new graduate nurses in nursing practice. Crucial factors influencing these experiences such as

organizational leadership, positive work relationships with other nurses, physicians, and patients (Lake, 2002), have been examined. In line with a recent call for management research to deepen current understanding of the healthcare field and nursing (Harms & Lowman, 2020), the current research applies a management perspective to the experiences of individuals in nursing. This is the first step in the quest to understand if current human resource practices developed and used in more traditional business corporations can be applied and equally effective in unique occupations and work environments like nursing. In addition to the work itself, several factors make the nursing work environment unique including the irregular and long work hours, nontraditional shifts worked by nurses (including overnights and weekend hours), non-fixed schedule days (i.e., working three non-consecutive days per week), and the variability in the nurses' work assignments and co-workers daily (Duffield & Franks, 2002; O'Brien-Pallas et al., 1997; Sjögren et al., 2005). Like some previous studies, I examine how organizational characteristics contribute to nurses' attitudes and outcomes (Adams & Bond, 2000; Castle & Engberg, 2006; Hutchinson et al., 2008; Wade et al., 2008). Additionally, I consider innate motives in nurses' interpretation of their work experiences and their subsequent work outcomes.

Furthermore, this research aims to link parallel research from the careers and turnover literatures together to achieve a comprehensive understanding of how one influences the other. In doing so, the research contributes to the current body of work that recognizes the variations in turnover (occupational or professional and organizational) and the importance of investigating which factors influence each one or both collectively. Lastly, the research contributes to the ongoing inquiry on the impacts of the COVID-19 to the work environment and its ripple effects on work outcomes. In the following sections, I provide overview of existing career choice



theories, particularly the two most relevant to this dissertation study. I also summarize my research plan and questions which will then be addressed in three separate research papers.

### **Literature Review of Career Choice**

With the rise of the nursing shortage, research interest has sought to understand people's motives for entry into and exit from the profession (Jirwe & Rudman, 2012). As such, various studies (qualitative and quantitative) have been conducted. In most of the available research, nursing is described as a helping profession such that altruistic or prosocial values dominate employee interest in the career. To a lesser extent, other practical and passive motives for becoming a nurse have been discussed. Scholars suggest that career choice motives have consequences on future performance outcomes and retention in the profession, establishing some criterion validity (Baard & Neville, 1996; Deci & Ryan, 2000; Price, 2009; Sheldon et al., 2004). However, only the consequences of prosocial motives have received mass attention in the literature. Such narrow examination of career choice motives in nursing research creates a gap in the comprehensive understanding of all nurses and the strategies needed to retain them. Considering the COVID-19 pandemic, the need to understand nursing career choice motives and how to maintain the attractiveness of the profession has been recognized (Morin, 2020; Rosa et al., 2020).

Early studies and research view career choice as a one-time static decision (Ashforth & Saks, 1995). This view also applies to grounding research of career choice in nursing (Price, 2009). Hence, the nomological network of the career choice literature is skewed with an abundance of antecedents and predictors of a nursing career (Glerean et al., 2017; Hayes et al., 2006; Price, 2009; While & Blackman, 1998; Wu et al., 2015). However, as Price (2009) notes, new research should incorporate an understanding of career choice as a dynamic process that is

open to frequent adjustment and construction. This is a sentiment shared by Mihal et al. (1984) who proposed the process theory of career decision making whereby the impact of current events are factored into the choices individuals make regarding their careers. A dynamic view of career choice provides the framework for linking initial career choice motives to turnover intentions and eventual turnover. Establishing this link then allows researchers to explore mediators and moderators of the relationship.

Career choice comprises activities related to the preparation for, choice of, entry into, and adjustment to work throughout the life span (Super, 1980). It is an active process that forms throughout a person's life experiences (Ashforth & Saks, 1995). Career choice strongly differs from occupational interests or ambition which are attitudes a person develops towards a career or occupation (Wheeler & Mahoney, 1981). Extant literature adopts one of three career choice perspectives – developmental, person-environment fit, and social -cognitive – which I discussed in this section. I also discuss Mihal et al. (1984) process theory as it applies to the development of research ideas in this dissertation.

Super's (1980) seminal work 'Theory of Vocational Choice' comes from the developmental perspective of career choice. It considers the influence of various developmental life stages on career interest and choice. According to the theory, there are nine main roles and four main theatres that people exist in, during their life. The roles are child, student, leisurite, citizen, worker, spouse, homemaker, parent, and pensioner. Although it is not always expected, most individuals progress through these life stages and roles chronologically. The four main theatres where roles are enacted include the home, community, school, and the workplace. Super's theory provides insight into why individuals enact career changes through different life stages. It also highlights the role of self-concept and life experiences on career-related decisions

(Flum & Blustein, 2000). However, it does not sufficiently explain a person's occupational choice. Although the theory later recognizes the dynamic nature of careers, its applicability to certain groups of workers (i.e., women and minority) remains a limitation (Price, 2009).

Within the person-environment fit perspective, Holland's (1959) 'Career Typology' is most prominent. This perspective is based on the role of personality orientation and how individuals choose a career and job to reflect who they are (Holland, 1966, 1985). Personality orientation refers to the ways in which an individual prefers to interact with the environment including activities performed and behavioral style (Latack, 1981). Holland (1985) classifies personality orientations into six types: realistic, artistic, investigative, enterprising, social, and conventional. He also assumes work environments that are classified using the same six types as personality orientation. According to this theory, career development is therefore a cyclical process whereby individuals develop preferences for certain activities that lead to the development of career interests related to those activities. However, various meta-analytic reviews show that the theory lacks criterion validity (Tinsley, 2006; Tranberg et al., 1993; Tsabari et al., 2005).

One of the most extensively researched career choice theories is the social cognitive career theory (SCCT; Lent et al., 1994). This theory adopts and emphasizes self-efficacy as a predictor of career choice (Bandura, 1977; Hackett, 1995; Hackett & Lent, 1992). Self-efficacy refers to a person's belief that they can perform the requirements of their jobs (Bandura, 1977). Social learning theory states that individuals develop self-efficacy through one of four ways: direct experience, behavior models, persuasion from other people, and the assessment of current physical and emotional capabilities. SCCT has been very prolific in studies investigating the influences of career choice for women and minorities (Betz & Hackett, 1981; Hackett & Betz,

1981; Tang et al., 1999). The original SCCT is based on three interlocking models of interest development, choice, and performance (Lent et al., 1994; Lent & Brown, 2019). Additional models of job satisfaction and career self-management have been discussed since then (Lent & Brown, 2006; 2013; 2019). SCCT offers a comprehensive framework to our understanding of career choice by recognizing the interaction between multiple individuals, social, and environment influences (Lindley, 2005). The theory has garnered massive empirical support (Betz et al., 1996) and has been applied in few nursing research studies (Chang, Chu, Liao, Chang, & Teng, 2019a; Chang, Lee, Chu, Liu, Liao, & Teng, 2019b). This theory has been very prolific in studies investigating the influences of career choice for women and minorities (Betz & Hackett, 1981; Hackett & Betz, 1981; Tang et al., 1999). Although SCCT is a practical and useful theory, it is not without its flaws. Researchers cite the need to clearly delineate the career behaviors proposed in the SCCT framework with specific measures (Betz & Hackett, 2006). Like the others discussed, SCCT also assumes a stable industrial economy (Meijers, 2002) which is no longer valid.

Identifying the need for an overall theoretical framework in which career decision making can be studied, researchers introduced a process model (Mihal et al., 1984). The process model identifies various cognitive and behavioral events involves in career decisions and recognizes the “in motion” attribute of career choice with feedback loops on career information that calls attention to the decision maker of any discrepancy for in career role expectation and current experiences triggering a need for a change strategy related to career choice. This model may be beneficial in investigating career decisions made by people already working in a specific career as well as career changes often made by students, depicted as a change in academic major of study during college. The process model offers a useful platform with which to incorporate

turnover theory into career choice literature. The assumption that career choice is “in motion” differs from the original static view of careers and accounts for changes in preferences, the influence of encounters with one’s job in how individuals proceed in their career development. Hence, the overall model of my dissertation relies on the principles of process theory. Furthermore, I consider other relevant theories such as SCCT (Lent et al., 1994) and self-efficacy theory, specifically occupational coping self-efficacy (Bandura. 1977; Pisanti et al., 2008).

### **Career Choice in Nursing**

Motives for selecting nursing as a career path are highly consistent across various qualitative interviews and empirical surveys of nursing students and current nurses (Mooney, Glacken, & O’Brien, 2008; Price, 2009). In a qualitative study of forty undergraduate nursing students, While and Blackman (1998) found that half of them went into nursing because of their desires to work with and care for people. Other predictors of nursing career choice identified in their study include a lifelong childhood desire, exposure to the job of nursing either because of self or family member illness in the past, and references to parental and family influences. The favorable perception of nursing as a career with high job security and great earning potential is another reason individuals go into nursing practice (While & Blackman, 1998). Jirwe and Rudman (2012) introduced three main reasons participants identified as the motive for becoming nurses – “genuine interest”, “practical choice”, and “default choice.” Nursing as a default choice reflected parent or family input, the inability to get into a different program, and mere chance as influencers of career choice. Practical reasons imply that the individual considered the economic (ease of getting a job) and versatile aspects (being able to perform various tasks) of nursing in their decision to pursue the career. Genuine interest implied that respondents had a desire to care for others, which has been echoed in other studies (Bariball & While 1996; Mooney et al., 2008; While & Blackman, 1998) and develop a deeper knowledge of the healthcare industry.

Jirwe and Rudman (2012) depicted the three career choice motives on a continuum of autonomy whereby genuine interest reflect a high autonomy in decision and default choice, in their assumption, represent the least autonomous motive. They apply these assumptions in their application of self-determination theory (SDT; Deci & Ryan, 2000) to understand perceived stress, burnout, and turnover in a longitudinal study nursing students in a Swedish nursing program. According to SDT, the degree to which a decision or motive is self-determined (i.e., autonomous) influences subsequent outcomes of that choice. Hence, nursing students with genuine interests were less likely to turnover than those with a default choice motive (Jirwe & Rudman, 2012). The skewness of their sample whereby more students expressed genuine interests in nursing, lend support to their assumption. Additionally, they assumed that students who quit nursing after time 1 and prior to time 2, were mostly students with default choice motives who experienced high stress and burned out of the program.

Other research has focused on environmental and contextual factors that predict the choice of nursing career. In a meta-study of ten qualitative studies, Price (2009) found that early life socialization processes led to individuals' decisions to become nurses. Socialization experiences increased self-identification and motivation for nursing among respondents. However, early exposure to nursing also contributed to dissonance and distress for individuals with an overly idealistic image of nursing and what the profession entails. Price and colleagues (2013) examined respondents' narrations of the career choice perceptions and influences among the newer generation of individuals. Their qualitative inquiry informs nursing practice on necessary changes to the field of nursing to enhance interest and recruitment of the younger generation to a nursing career. Particularly, they find young people in nursing desire an opportunity to make a difference and impact people's lives while engaging in a virtuous

occupation. Some others chose the career because it reflected who they are and helped to reinforce their self-concept (Price et al., 2013).

### **An Overview of Turnover Research in Nursing**

Nursing turnover is the highest of any profession (Hart, 2005; Mosadeghrad, 2013). Conclusions from numerous studies suggested that nurse turnover is predicated by burnout and nurses' dissatisfaction with working conditions (Aiken et al., 2012; Aiken et al., 2012; Hayes et al., 2012; Takase et al., 2009; Arslan Yürümezoğlu et al., 2019). Burnout results from the high job demands and stressors of work in nursing. Nursing work stressors often include nontraditional work schedules, irregular and long work hours, negative relationships with coworkers, and inadequate leadership or poor management (Aiken et al., 2002; Aiken et al., 2014; Kunaviktikul et al., 2015; Scott et al., 2013). Insufficient rewards provided to nurses compared to their workload and level to risks is another reason given for turnover (Chan et al., 2013; Lavoie-Tremblay et al., 2008). Interrole stressors, or work-family conflict (Greenhaus & Beutell, 1985) also account for nurses' perceived job demands (Battistelli et al., 2013; Grzywacz et al., 2006). On the other hand, variables like job satisfaction, organizational identification, perceived organizational support, and transformational leadership, have been shown to positively influence nurses' staying intentions and decrease turnover rates (Hayes et al., 2012; Lo et al., 2018; Lu et al., 2005; Mael & Ashforth, 1995; Unruh et al., 2016; Van Dick et al., 2004).

However, the research field is not clear as to how individual factors or attributes shape nurses' experiences and their intent to turnover. Mazurenko et al. (2015) found that both organizational and professional turnover were predicted by a different set of factors. Their finding mirror Price and Mueller's (1981) conceptualization of causal model of turnover in nursing. In two of the three papers discussed here, I consider career choice motives as an

individual factor that contributes to differences in nurses' perceptions and interactions with their work environment, and subsequently their career decisions related to turnover intentions.

### **Overview of Research Questions and Study Plan**

The dissertation presents two papers on career choice and its effects on nurses' work outcomes and attitudes. The final paper builds on findings from Essay 1 on the role of organizational efficacy (OE) in health care organizations. OE literature is sparse and has not typically focused on individual-level predictors and outcomes. Hence, I contribute to the research by investigating individual-level predictors and influences of organizational efficacy (OE) among new nurses and the subsequent effects of OE on work outcomes.

Essay 1 (see Figure 1) explores career choice and decision making motivated by crisis and unexpected change in the workplace. I investigate how new nurses' career motives are impacted by events like the COVID-19 pandemic. This investigation is conducted using both qualitative (in-depth interviews) and empirical survey questionnaire) methods. The research question formally addressed in essay 1 is "How do initial career choice motives influences work outcomes among new nurses following the COVID-19 pandemic? Additionally, how do the interactions between OE and career choice motives predict nurses' behavioral intentions?"

Essay 2 (see Figure 2) explores the effects of career choice motives on professional commitment and occupational coping self-efficacy, and subsequently intent to turnover. I aim to answer this research question "What are the direct and indirect effects of career choice motives on the organizational and professional work outcomes of nurses in healthcare? In what ways do occupational self-efficacy and professional commitment mediate the relationship between career choice motives and turnover intentions among new nurses?" I consider the role of socialization as a moderator of the motives expressed and include an additional question: "To what extent



does professional socialization influence the relationship between career choice motives and attitudinal outcomes of professional commitment and occupational coping self-efficacy?"

As discussed above, Essay 3 (see Figure 3) reflects on the predictors and outcomes of organizational efficacy at the individual level of analysis. The research question posed in this study is "What is the relationship between nursing work demands and OE? Additionally, what are the subsequent effects of OE on attitudinal and behavioral outcomes?"

## Chapter 2: The Experiences and Work Outcomes of New Nurses During a Pandemic

On the heels of recent developments in nursing and healthcare, such as the designation of 2020 as the “Year of the Nurse”, the COVID-19 pandemic further propelled nurses into the global spotlight for their role as frontline workers in the fight against mass death. As a critical and strong event, the COVID-19 pandemic has upended countless lives and businesses and influenced significant changes in the performance of work (Angelucci et al., 2020; DeFilippis et al., 2020; Vaziri et al., 2020). Nurses and other frontline HCWs have borne the increased risk of infection and death (Abelson, 2020; Cook et al., 2020). During the pandemic, nurses accounted for 60% of the people termed *frontline workers* (Wang et al., 2020). As of June 2021, about 500,000 health care personnel had been infected, and more than 1,600 deaths recorded (CDC, 2021<sup>2</sup>). Although the demands for nurses spiked during the pandemic (Incredible Health, 2020), reports show that the pandemic also led to high turnover rates among nurses who found the circumstances of being essential workers in a pandemic, too challenging (Youn, 2021).

As is typical of health crises, nurses bore the greatest responsibility to the safety of their patients and the general society during this pandemic (Carter, 1999; Sharma et al., 2016). As a result, they are experiencing an increase in the volume and intensity of their work (Maben & Bridges, 2020). In addition, they have had to cope with extreme and changing guidelines on infection management and safety measures implemented in their workplaces (Catania et al., 2020; Maben & Bridges, 2020). These measures have impacted regular protocols for patient care as well as orientation and training structure for new nurses. For example, changing CDC guidelines mandated fewer staff in COVID-19 wards (CDC, 2020) thereby restricting the

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<sup>2</sup>Statistics updated daily and can be found at: <https://covid.cdc.gov/covid-data-tracker/#health-care-personnel>

number of personnel available to provide patient care. Although research demonstrates that most nurses are willing to continue working in a pandemic (Aliakbari, Hammad, Bahrami, & Aein, 2015), other studies have found that not everyone in nursing is willing to accept the risks associated with their occupation during a pandemic situation (Koh et al., 2012).

Prior to 2020, there were already concerns over the global shortage of nurses given its detrimental effects to healthcare organizations and the society at large (Brunetto & Teo, 2013; Littlejohn et al., 2012; Oulton, 2006). A nursing shortage increases risk of errors and patient safety incidents by overwhelmed and stressed nurses in understaffed health facilities (Welp et al., 2015). In addition, organizations bear unnecessary costs of turnover and employee replacement and lawsuits (Lang, 2001). It is now likely that the COVID-19 pandemic will amplify the detrimental effect of a nursing shortage. Previous research has found that nurse turnover is often higher among newly licensed or graduate nurses who quit because they are unable to effectively transition from nursing education to practice (Laschinger et al., 2016; Read & Laschinger, 2015; Urban & Barnes, 2020). New and inexperienced nurses quite often struggle with feelings of competence, interrole role conflict with work and nonwork aspects of their lives, and aggression and bullying from older, experienced nurses (Flinkman & Salanterä, 2015; Simons & Mawn, 2010). Turnover among new nurses is often as high as 60% (Aiken et al., 2001; Flinkman et al., 2008). This occurrence often creates trickle-down effect of turnover whereby remaining nurses have a higher caseload of patients. Increased workload of the remaining nurses then leads to high burnout, job dissatisfaction, and eventual turnover among experienced workers (Mazurenko et al., 2015; Strachota et al., 2003).

The COVID-19 pandemic poses unique challenges to the transitioning and socialization process of new nurses as hospitals and other health care organizations have had to adapt the

normal operating procedures to reduce the spread of the virus. It is likely that these challenges impact workers attitudes and behaviors related to turnover. However, the extent to which turnover occurs may depend on several individual and environmental factors. In this essay, I investigate the propensity of new nurses to leave their organization and profession because of experiences with the COVID-19 pandemic. Other studies have demonstrated that health crises often lead to high job stress and increased workload for nurses contributing to exhaustion and burnout (Gershon et al., 2010; Li et al., 2020; Sampaio et al., 2020). Also, situations like the COVID-19 pandemic negatively affect nurses' mental well-being. Nurses in various parts of the world expressed feeling anxious and depressed (Chew et al., 2020; Sampaio et al., 2020; Xiong et al., 2020). These occurrences (i.e., job stress, higher workload, burnout, and emotion) are known to increase the likelihood of nurses quitting. Additionally, negligence and patient safety errors can occur from increased work demands leading to mental and psychological distress (Aiken et al., 2002). In sum, nurses' overall well-being, patient safety, organizational functioning, and the nursing profession all suffer during a health care crisis. Therefore, an awareness of the challenges faced by nurses during the COVID-19 pandemic and their influence on turnover decisions, is vital. Such understanding can help to generate effective interventions and strategies to address workers' concerns and prepare for future health care crises.

Therefore, this paper investigates how new nurses' experience of, and reactions to the shock of a global health care pandemic is influenced by their career choice rationale and intrinsic motivation for becoming nurses. To begin with, career choice motives may influence how new nurses respond to crises when work demands exceed their expectations of the nursing work environment. In addition, the role of an effective organizational response is examined. It is important that organizations evaluate the effectiveness of current procedures and response

strategies as they can influence employee beliefs and perceptions. Hence, this paper assesses organizational efficacy (OE) among new nurses as a moderator in the proposed relationship between career choice motives and turnover intentions during a health crisis.

### **The COVID-19 Pandemic and the Nursing Profession**

The COVID-19 pandemic brought to limelight the importance of several occupations in society, the most significant of which are healthcare workers responsible for providing care and treatment to impacted individuals. In previous health care crises, the fear of contagion has led to interesting responses from health care workers. In previous research, most HCWs indicated they were less willing to report to duty (Basta et al., 2009; Crane et al., 2010; Gershon et al., 2010; Qureshi et al., 2005). During the COVID-19 pandemic, nurses and other HCWs had varied responses. In some instances, final year medical and nursing students chose to graduate early to help organizations address the problems (Harley-McKeown & Korn, 2020; Jackson et al., 2020), and numerous retired workers choose to come back into the field, in response to calls citing a shortage of healthcare workers to combat the pandemic. There has also been a slight increase in enrollment of students to nursing programs (AACN, 2021; Kowarski, 2020). At the same time, there has also been a high rate of nurse turnover because of the pandemic (Youn, 2020). Some nurses revealed they considered early retirement or job exit in lieu of reporting to work (Gershon et al., 2010). The variations described here raise interest in understanding what underlying mechanisms motivate the decision to quit during a pandemic as opposed to the decision to participate as a frontline worker.

Jirwe and Rudman (2012) identified eight career choice motives grouped into three categories of genuine interest, practical choice, and default choice. They suggest that genuine interest motives represent an active and autonomous decision-making process while default

choice motives are more passive and lack autonomy. Practical choice motives although active, are less autonomous but not as controlled as default choice (Jirwe & Rudman, 2012). Their conceptualization of autonomy in career choice using individual choice motives, was done to test the hypothesis that more autonomy in career choice will lessen perceived stress and burnout among nursing students. Their study found support although generalizable conclusions could not be drawn due to the skewness of their data sample (more students indicated genuine interest than any other motive). However, other scholars have signaled a link between autonomy in choice and subsequent outcomes (Deci & Ryan, 2000). This perspective is adopted in this study to examine how career choice motives and implied autonomy, is related to turnover intentions among new nurses. Historically, turnover in nursing is higher among newly licensed individuals who find the struggles and requirements of nursing practice too much to handle, either within a specific organization, or nursing in general. As these individuals start and continue to transition during a pandemic, it is important to understand their experiences and behavioral intentions as a result.

### **Hypothesis Development**

Kramer (1974) concluded that newly graduate nurses experience *reality shock* in the transition to nursing practice, resulting from the discrepancy between the expectations set in their nursing programs and the reality of the nursing work environment (Read & Laschinger, 2015; Scott et al., 2008). Clinical programs exist now as part of the nursing education to expose students to the nursing environment prior to their formal entry into the nursing workforce. However, the programs have not sufficiently diminished challenges new nurses face as they transition to nursing practice. Studies conducted mostly through qualitative methods have sought to identify the salient problems in students' transition to nursing practice (Urban & Barnes, 2020). The current research is underpinned by the work of Duchscher (2008) who identified

three transition phases for nurses within the first 12-18 months as a registered nurse (RNs). The phases include doing (experienced during the first 3-4 months), being (which takes place between months 5 and 9), and lastly, knowing (from 9 months onward).

The transition process described in nursing research is like the process of organizational socialization (Katz, 1960). Overall, the outcomes of the transition process and employee socialization are similar – an increase in job performance, job satisfaction, employee commitment, and a decline in employee turnover. The relationship between nursing transition and turnover among new nurses is due to the levels of stress nurses face within their first years on the job. Among the stressors encountered by nurses are inadequate support from supervisors, peers, and assigned preceptors, role conflict due to incompatible demands from their work and personal lives, expressed bullying, aggression, and often violence from peers and patients (Hutchinson et al., 2006). The main source of stress reported by new nurses, however, is a heavy workload which they lack either the time or resources to cope with. Given that the COVID-19 pandemic has led to an immense number of infections and deaths, it is likely that nurses in acute-care facilities are faced with a higher-than-normal assigned patient load to care for. This is a situation that may be extremely stressful for new nurses who lack the knowledge and resources to deal with COVID-19 patients. The overwhelming encounters may trigger negative perceptions and behavioral intentions among new nurses.

Nurses' reactions to the pandemic, however, may be influenced by their initial choice motives. For nurses with a genuine interest in helping and caring for others, the conditions of the COVID-19 pandemic provide an opportunity to do just that. Therefore, they may be less likely to leave because of their experiences. The challenges of the pandemic however may be too intense for nurses who came into the profession passively (default choice motives). They may be more

likely to perceive the discrepancy between their expectations of the nursing environment and the current reality, more negatively. Hence, they are more likely to quit their job and the nursing profession. For nurses with more practical career reasons, the pandemic may have satisfied their expectation for job security given the increase in the demand for nurses. However, this satisfaction is less likely to yield changes in their attitudes towards work (Deci & Ryan, 2000). Additionally, the high workload and work hours may be an opportunity for increased earnings, again satisfying their expectations of the nursing profession. However, since these variables are also present in non-pandemic times (i.e., more hours and high workload), they are not expected to experience any changes in their feelings towards their profession. Hence, the first hypothesis states:

Hypothesis 1a: Organizational turnover intentions among new nurses will vary based on initial career choice motives such that those with “genuine interest” motives will be less likely to consider turnover compared to those with “default choice” motives.

Hypothesis 1b: Professional turnover intentions among new nurses will vary based on initial career choice motives such that those with a genuine interest motive will be less likely to consider turnover compared to those with a default choice motive.

However, I do not hypothesize any relationship for practice choice motives as they are not expected to impact turnover intentions.

### **Moderating Effects of Organizational Efficacy**

During the COVID-19 pandemic, businesses had to adapt and address disruptions to normal operating procedures. Health care facilities faced a different kind of struggle – inadequate information and preparation for the coronavirus (Davoodi et al., 2020; Incredible Health, 2020; National Nurses United, 2020). Crises like coronavirus, Ebola, and other health epidemics usually expose the flaws in the health care system and may threaten their continued existence.



Related to this is the concept of organizational efficacy (OE) which refers to the " generative capacity within an organization to cope effectively with the demands, challenges, stressors, and opportunities it encounters within the business environment (Bohn, 2010). OE is an aggregated measure of individual employees' rating of their organization's (a) collective capacities, (b) mission or purpose, and (c) sense of resilience" (p. 233). Although OE has not garnered much attention to date (Bohn, 2010), yet it is regarded as being consequential to organizational performance (Gist, 1987). Perceived efficacy is useful in determining employees' commitment to the organization in the face of failure or adversity (Bandura, 1986; Bohn, 2010). It is also a useful measure of an organization's future performance and health (Arnetz & Blomkvist, 2007). The handful of research on the topic found relations between OE and leadership (Bohn, 2002; Gunzel-Jensen et al., 2018), collective performance of groups (Caprara et al., 2003; Chen & Bliese, 2002; Chen & Lee, 2007; Gully et al., 2002; Tasa et al., 2007), and organizational performance (Bradford, 2011; Katz-Navon & Erez, 2005).

The health care industry is one context in which OE may have far-reaching consequences which are still unknown. Studies show that OE can determine the level of efforts and involvement an employee is willing to devote to their organization (Bohn, 2010; Zaccaro et al., 1995). Hence, it is likely that nurses incorporate the perceptions of their workplace when deciding whether or not, to quit. As the pandemic progressed, nurses could observe inadequacies of their organization's preparedness and response (Catania et al., 2020). Basic protective equipment was scarce and often unavailable when needed (Said & El-Shafei, 2020), increasing the risks nurses were exposed to. News reports surfaced that allowed nurses to be privy to the operations of other organizations in their environment and globally. Furthermore, nurses with friends in other hospital and health care facilities could gather information about the response to

the pandemic in that facility. Hence, nurses had enough information with which to rate their organization's efficacy in addressing the challenges posed by the pandemic. A recent finding by Sampaio et al. (2020) offers limited support to my assumptions on the role of organizational efficacy. Nurses that considered that their organization had sufficient personal protective equipment (PPE), had lower depression, anxiety, and stress levels compared to those that did not (Sampaio et al., 2020). Of the three OE components, sense of resilience - employees' perceptions of the organization's ability to weather storms and persist in the face of obstacles, is a crucial concept to examine during crisis situations. Therefore, I make the following hypothesis:

Hypothesis 2: Organizational efficacy in crisis will significantly moderate the relationship between career choice motives such that:

Hypothesis 2a: Under conditions of low or moderate OE, career choice motives will produce differences in new nurses' turnover intentions based on their career choice motives (i.e., genuine vs. non-genuine interest).

Hypothesis 2b: Under conditions of high OE, the relationship between career choice motives and turnover intentions will be attenuated, such that new nurses will display similar turnover intentions regardless of their career choice motives.

Practical choice motives are also not expected to be influenced by organizational efficacy during crisis situations hence, I offer no hypothesis for this relationship. The research questions and hypotheses developed in this paper are addressed through a mixed-method study (interview and survey questionnaire). In-depth interviews with five nurse participants are described in study 1. In study, I empirically test hypothesis 1 and 2 with cross-sectional survey data collected from currently employed nurses. The hypothesized model tested in this study is presented in Figure 1.

## **Study 1: The Lived Experiences of New Nurses with COVID-19**

In the summer of 2020, interviews were conducted with five new nurses beginning in June 2020 to April 2021. New nurses are described as those in their first job post-nursing education with between six months and three years of work experience. It is worth noting that of the five interviews, four were conducted consecutively between June 2020 and July 2020. The final nurse interview was conducted in April 2021. The fifth nurse was interviewed to increase data points in the study and, to achieve triangulation of findings. Rigorous efforts were taken to recruit participants for the study. However, due to the overwhelming nature of the nursing environment from the pandemic, nurse availability was limited. The sample of nurses utilized in this study were recruited through a convenience sampling of personal contacts and referrals. Participants had to meet certain eligibility requirements to be interviewed. One important criterion was that they should be classified as “essential” implying they were still required to appear in-person to work during the COVID-19 pandemic. All five nurses were employed in different health care organizations across the US. Out of the five participants, three worked in the ICU and interacted frequently with COVID-19 patients. Of the five participants, there were four female nurses and one male nurse. The total years of nursing work experience ranged from six months to just under three years. The demographic information for each of the participant is provided in Table 1.

### **Methodology**

Data were collected through semi-structured in-depth interviews. The questions included in the interview were drafted with the help of a nursing educator (RN, PhD) and members of my research committee. The interview protocol and other aspects of the data collection were submitted to and approved by the Institution Review Board (IRB). A total of 11 interview questions (Appendix) asked participants in the current study about their early career choice

decisions, effects of their college education, their experience with COVID-19 as frontline workers, and their current career intentions.

Prior to interviews being scheduled, participants were asked to complete a survey to determine their eligibility based on the inclusion criteria. Once eligibility had been determined, participants were sent a copy of the IRB approved consent form and a one-page word document with information on the research study. At the beginning of each interview, an abridged version of the consent form was read to participants and their verbal consent was recorded as part of the interview. To assure participants' confidentiality and anonymity, all identifying information was removed from the transcript and participant interviews were saved using a 5-digit generic code. In the paper, participant quotes are reported using generic labels (i.e., Nurse 1, Nurse 2, ...). The interview protocol was divided into two parts – a demographic section and the main interview questions. All interviews were conducted through Zoom and recorded with the permission of the participants. At the end of the data collection process, the interviews were transcribed verbatim using the NVivo (v. 12) transcription software. Inaccurate transcriptions were identified and corrected prior to data analysis.

A phenomenological approach was adopted to understand the lived experiences of new graduate nurses during the COVID-19 pandemic. A phenomenological analysis is suitable for revealing inherent meaning in the narratives people divulge about their experiences (Riessman & Qinney, 2005). Specifically, I engage in descriptive phenomenology (Giorgi, 2009) given the limited knowledge about COVID-19 and individuals' work experiences. Interviews in phenomenological studies typically include between five and 25 participants (Polkinghorne, 1989). A descriptive phenomenology is appropriate for answering the research questions posed in the first essay given the recency of the COVID-19 pandemic and the fact that a large amount

of nursing professionals, are experiencing it at the same time. A descriptive phenomenology approach (Giorgi, 2009) allows researchers to examine in-depth how individual experiences shape their attitude, opinions, and outlook. This method of qualitative analysis is suitable for revealing inherent meaning in the narratives people give about their experiences (Riessman & Qinnay, 2005). Descriptive phenomenology is a common research method with nursing studies (Matua, 2015).

In phenomenological research, it is likely that the researcher also brings their perspectives, experiences, values, beliefs, and identity to the data collection and analysis process (Lee et al., 2014). While I do not hold a degree in nursing or have any nursing work experience, I have interacted with several nurses in my social circle. For a period of about 2 years, I lived with a nurse during her transition from nursing education and had the opportunity to observe her navigate the requirements of her job while balancing the responsibilities to her family (a husband and two children under the age of 10). Along with my experience living with her, my interest in the topic of nursing career choice and turnover was driven by a separate research project in which I synthesized qualitative studies of violence and aggression in nursing. My motivation is to inform healthcare administration about the challenges new nurses face and identify practical solutions and interventions to addressing the problem such experiences create by influencing high turnover among nurses. It is important as a researcher with proximity to the topic to clarify existing assumptions prior to the study (Patton, 2015). Hence, the following assumptions were clarified prior to the study:

1. Each participant has experienced the phenomenon of interest.

2. The participants' experience of the phenomenon would make them an expert in the experiences of new nurses' transition to nursing practice during a health care crisis like the COVID-19 pandemic.
3. Participants would be willing to share their experiences with the researcher and give an accurate description of their experiences.
4. As a researcher, I would strive to participate in ongoing bracketing (separation) of my own knowledge, beliefs, and experience with the phenomenon of interest but also acknowledge that they may influence to the findings of the study.

### **Data Analysis**

Thematic coding and analysis of the data was done using the NVivo (v. 12) software for qualitative research. Colaizzi's (1978) approach to descriptive phenomenological research was used for thematic coding and analysis of the response data. First, each participant's transcript was read by the researcher several times to develop a deep understanding of the description and make sense of it. Second, individual transcripts were reread and phrases that relate to the phenomenon under investigation were extracted, such as the nurses' specific experiences. Third, I formulated meanings from significant statements in the interviews. Fourth, the first three steps were repeated for each transcript and then aggregated formulated meanings into clusters of themes. In the fifth step, comprehensive themes were identified, and an exhaustive description was developed. The sixth and last step involved identifying an essential structure of the description of the experience narrated by participants. In addition, Colaizzi (1978) cautions against omitting or ignoring participants statements that do not fit with the main narrative of the paper.

**Triangulation.** This is a key component of every qualitative study. Patton (2002) states that there are four types of triangulation methods – method, theoretical perspective, sources, and

analysts. It is important to attain at least two methods of triangulation in a study. Triangulation reduces systematic bias in the qualitative data of a study. Triangulation of analysts was achieved by consulting two external researchers (tenured professors in the College of Nursing and School of Social Work) who engage in qualitative research and data analysis within their respective fields. Further triangulation is achieved in the data based on the participant characteristics. Not only were respondents located in different regions across the United States, but they also worked in different specialty areas. Additionally, the last interview conducted was utilized as a verification of the information gathered from the four previous participants.

## Results

Overall, three meta themes and four subthemes emerged from the qualitative study. Each theme is discussed in greater detail below. Themes are supported by quotations from the participants. A summary of the themes, subthemes and selected quotes are presented in Table 2.

**Theme 1: Nurses' Choice Motivations and Expectations.** This theme describes the motives and influences that led to participants' decisions to become nurses in the first place. Participants highlighted one significant motivation as well as various other minor incidents that helped to clarify or confirm their decisions.

Among the significant motives given, all but one participant indicated an innate desire to care for other and be of service to the greater community.

My mom's a nurse, my brother's a doctor. So, while growing up, it was just something I was very interested in because, you know, my mom owned a clinic back in Nigeria. So, she was basically self-sufficient. She was doing everything for our community. So, growing up, I thought that would be something nice that I could get into and work in.

(Nurse 4)

For nurse 1, having been previously employed as a government contractor, her decision to pivot and become a nurse stemmed from an innate desire to make an impact: “I worked in government contracting...I didn’t really feel like I was helping anyone. Like I wasn’t really benefitting society.” The only dissenting voice, Nurse 2, indicated an affinity for the health care industry. However, more practical reasons of work-life balance and flexibility to care for family led to her decision to study nursing. “I thought about other things that I had to put into consideration, like my family and all that. And, like the availability of jobs and everything. So, I decided to go into nursing.” However, as Jirwe and Rudman (2012) point out, career choice motives often co-exist such that a person has both prosocial and practical reasons. Nurse 2 in a later part of the interview, described her greatest satisfaction as the ability to help others get well, reflecting altruistic values in her daily work performance.

Along with the main motives expressed, participants’ decisions were also often driven by family influences or a life-changing exposure to the nursing work environment prior to starting their own nursing career. For one nurse, the experience was close to home: “My dad had cancer, my mom took very good care of him. So, I thought, you know, maybe I could do that for somebody one day, so... that's how I ended up here.” (Nurse 4). Also, the presence and visibility of nurses in health care settings influenced the choice of a career path for a couple of the participants.

I realized [that] in health care settings, I saw the nurse's face. You know, I interacted with the nurses the most. So, I respected that profession a lot more in health care settings. So that is why I decided to pursue being a nurse. (Nurse 3)

So, I remember when I gave birth to my daughter in 2014. You know, I had had my daughter in this hospital that I am working at right now. And, you know, I liked the way



that the nurses cared for me, they cared for my husband. You know, it was not just about, you know, you are here to have the baby, then you are done. It was more like affectionate. And, you know, kind of care that I received. So, you know, that that helped me. You know, to also narrow down to like, OK, I think this is what I really want to do because I like how this people cared for me as a person and cared for my baby and cared for my family. (Nurse 2)

A sense of calling passed down from his parents significantly influence another nurse's decision:

Both my parents are missionaries and so just always being around the family that cater to other people's needs, even though it was not in the medical sense, more so on the physical and spiritual, that kind of just led to my desire to help others as well. (Nurse 5)

Participants also expressed a realization of their expectations for the nursing profession in most cases. However, they described some aspects of nursing as being either contrary to the expectations or as having fall short.

After nursing school, getting my first job, and working, you know, you feel this sense of, OK. I feel like I have a purpose. I feel like I accomplished something, you know, being able to help somebody go through something or be able to run a code or being able to, you know, just watch a patient go from being stable to unstable and have to transfer them to PCU or ICU, you just feel like a sense of like, you know, I really did this, you know, I really have the power to change somebody's life. (Nurse 4)

But in terms .... you know in terms of where my expectations have not been met, I feel like we are underpaid. For the...what...the stress that we go through and, you know, the exposure that we have at work. I feel like, you know, we deserve to be paid more. (Nurse 2)

**Theme 2: Working During COVID-19.** This theme details the experiences of new nurses with the COVID-19 pandemic. The theme highlights issues that were of most concern to participants regarding the pandemic and their workplaces. It also highlights vital attitudes and emotions that warrant management understanding and consideration. Four subthemes are apparent under this theme: contrasting treatments, being essential, heard but not supported, and a different workplace.

***Subtheme 1. Heard But not supported.*** Prominent in the experiences described by all the participant is the lack of instrumental support, and often emotional support from the management of their respective health care organizations. As described in several articles, health care experienced a shortage of critical supply and protective equipment and continue to face these challenges a year later (Chaib, 2020; Cohen & Rodgers, 2020; Emanuel et al., 2020; Jacobs, 2020; King, 2020; Livingston et al., 2020; MacIntyre et al., 2020). This fact is echoed by every participant in the interviews: “The treatment could be better [from the employer]. They didn’t have a lot of PPE, it was re-using the same mask and, at first, you got one N95 for the whole day...” (Nurse 1). The shortage of protective equipment raised several issues for nurses including the heightened exposure to infections and transmitting them:

You could be going into a patient's room that was like a possible COVID patient and then another patient who actually was COVID. So, if they were not COVID before it is like, are you giving it to them? Yeah. And there is just really, at least in the hospital that I am at, I feel like there is not really a lot of resources for the, for us. (Nurse 1).

Coming from a profession [where] wearing one mask to two different patients’ room was forbidden, now you are wearing one mask to five or seven patients’ rooms for the entire week. So, if they were not affected by COVID, they were bound to be infected by

something else, whether it was some type of resistant organization. When I say organization, resistant bacteria, or some...some. I mean, it could be a lot of things. (Nurse 5)

Additionally, participants reported frustration over their situations. Their statements indicted that health care facilities did not cater to their workers as well as they did for patients. Nurses were not granted additional paid time-off in the case of infection. Furthermore, hospital guidelines changed so frequently exacerbating the challenges nurses already faced with their “new normal”. The heightened risk and exposure increased perceived job stress and anxiety for nurses. The quote by Nurse 3 below summarizes the emotions expressed by most of the participants:

I felt heard, but I do not necessarily feel completely supported. But I think it was above their level. I mean, like running out of PPE was frustrating, like running out of masks. And with the like just changing guidelines...[I] feel [un]safe in my own job like, who gets tested? How many times do they get tested before we proclaim them negative and the inconsistencies with all of that. It just made me feel unsafe. And at, at some point, I think earlier on there was not a plan in place. If a nurse got sick, you had to have your own PTO to cover it. And me being newer on the unit, I did not have that much PTO, so it was just a lot of stress of not feeling supported. (Nurse 3)

***Subtheme 2: Two Sides of Being Essential.*** As the pandemic began to spread across the globe, nurses were thrown into a spotlight as “essential” workers. While most businesses were forced to shut down and employees transitioned to working from home, individuals in specific industries remained essential, vital, and “allowed” to continue the physical commute to work. For nurse participants, being designated essential was the appropriate and obvious thing to do:

How I feel about it? I feel like I guess they kind of have to be I mean, somebody has there to take care of the people that are at the hospital. It is not like.... if it was like FedEx or something, if FedEx does not show up like people can wait a day or two to get the mail whereas if you are a nurse or a doctor or a tech or anything like that, people are going to suffer if you are not there. You cannot put it off. (Nurse 1)

I think I mean; it was the right thing to do because we definitely are essential workers. People are still sick. I mean, we are definitely, COVID is kind of a sickness, right? So definitely we..., we are essential because if we did not work, definitely...a lot more people would have died. (Nurse 2)

I mean, I was not surprised. I mean, even before COVID it was like we worked holidays. We worked nights. You know, the hospital does not close. It is always open... So, pandemic or not, I think I have always considered myself, an essential worker (Nurse 3)

But at the end of the day, I did not really feel two ways about it because, I mean, I have taken care of patients with TB. I have taken care patients with other things. COVID is just something new and I feel like eventually we will all get adjusted to the lifestyle. So, I did not really feel any type of way about being called essential. (Nurse 4).

On the other hand, the designation of being essential reveals a peculiar characteristic of the nursing profession. Within some hospitals, the communication to employees indicated a lack of choice nurses had in whether to work with COVID patients regardless of the risk it posed to their lives:

I remember the first day our charge nurse pulled us into a huddle, and he said, okay, guys, you know, you cannot choose not to take care of a patient. You are a nurse. You

signed up to take care of everybody. You know, obviously, people some people were not happy. People were crying because, you know, COVID is real...everybody is scared.

...this is not a... a career you can just switch off and switch on. I mean (umm) basically a career you cannot just leave when you are tired, when you are, you know, just ready to quit. (Nurse 4)

...just the way that they communicate with employees like, for example "Just suck it up and do it." You know, those are some of the some of the things (I am paraphrasing there) but in essence, that is what most or some high-level management would tell their employees during which time. It is out of our control, so we still have to do what we have to do. (Nurse 5)

The comments from both participants reflect what is common knowledge among nurses – the fact that they are often expected to adapt to their changing environment without much support or understanding from management (Adriaenssens et al., 2015). Delving further, nurses' attitudes towards being designated essential workers brought to surface the fact that prior to this pandemic, even though there have been health crises in the past, nurses never received due recognition from the society. As Nurse 3 describes it:

I think before the pandemic...how hard we worked at the hospital, no matter what, was not as recognized... It felt nice to be recognized, even though we were doing pretty much the same thing... I felt like we were put on pedestals, you know.... And it felt nice.

Another participant (Nurse 1) also alluded to this prior lack of recognition with this statement:

“[It] Kind of made me feel nice, like they considered me essential. Normally I feel like when you think like an essential employee, you think of like fire department, police officer, EMT, stuff like that”.

*Subtheme 3: Contrasting Treatments.* Unlike the great praise and appreciation received from the public, nurses conveyed that the treatment from their health care organizations fell short of expectations. While management did vocalize their appreciation of their nurses, the treatment received proved to be contrary. As mentioned earlier, instrumental support was lacking from management (subtheme 1).

But then coming to the organization that I work for, I mean, they claim that, you know, all of you are our heroes, you are this or that. But I then you know, I feel like we could have been more appreciated than the way they did, not just in writing, but like monetary payments and or...I do not know, some award maybe that might...I was expecting more from my place of work, so I do not know. (Nurse 2)

Nurse 4 had the same thing to say about her organization “They [nurses] can be treated way better...Not every hospital is giving nurses a pay raise...or hazard pay. Not every hospital is actually paying their staff for that...management needs to change.” Going further, no other form of support – monetary or otherwise – was given. Even more so, health care managers and administrators displayed a passive regard for the safety of their nurses by not reacting to the shortage of protective equipment as quickly as they could have.

I mean, they say they have enough, but for some reason when you step on the floor and you really need to see your patient, it is always, oh, this is not a requirement. This is not important you know; they say they have it but then when you are...it is time for you to take care of your patient, they come up with stories. And then it seems like when they run out [of equipment], they are not even bothering to replace it or order...they take their sweet time, you know, they are not physically affected by it, is us that actually take care of patients that are affected by it. (Nurse 4)

...when it came to health care, these are things that would have to be mass produced for employees, for nurses, for HCWs to have accessibility to them. And so totally understand how gear was not available. But the length of time that it was not available is this problem. Starting from the recognition of the pandemic at that point, somebody somewhere I should have said we might come into a situation where we need more gloves. We might come to a situation where we need more face masks and head covers or all the gowns. So, I think the recognition came by very late. (Nurse 5)

***Subtheme 4: A Different Workplace.*** For the three ICU nurses, the significant changes to their work environment particularly with the patients, stood out for them. Suddenly, the patients they had expected to be caring for in the ICU were non-communicative and demanded a lot more attention that they were used to. Hence, providing care became more challenging and even more so, for new nurses with such limited experiences.

And so, whereas a typical ICU would have well, our ICU would have patients who are still verbal, who can still communicate with you. Now we are graduating into a pandemic where all 40 beds are fully ventilated patients who cannot talk. Most patients are paralyzed or are sedated at some level. And so. You are taking care of patients at their worst point and at a high level of acuity. (Nurse 5)

I feel like I had a lot of passion for my job before and I was really excited to be into cardiac ICU. But we did not have that population anymore, instead it was all COVID, instead it was all respiratory. You know, and we did not get our typical patient population. So, I think I got really exhausted and just stressful all the time. And yeah, there was a couple moments where I was like. Why am I doing this? (Nurse 3)

So, there is like a COVID ICU ... but whenever you go to that unit, there is no charge nurse or anything. So, it is just you and maybe like two, three other nurses and then the patients... it has been really stressful because like there has been a ton of times where, like I cry like before I go to work just because I feel like I am like kind of like by myself, like I have to take care of these people. I do not have the help that I need to really like I say, there is no charge nurse or anything. So as a brand new, like new grad nurse, that is really scary. (Nurse 1)

**Theme 3: Organizational Efficacy and Worker's Intentions.** Nurses voiced concerns and complaints about several aspects of their organization while describing their experiences with COVID-19 (theme 2). However, their statements indicate that health care organizations displayed a higher level of competency when addressing patient concerns during the pandemic. In a sense, health care facilities were equipped to maintain and improve their income stream by catering to COVID-19 patients. This is unlike their treatment of the available nursing and health care staff. Nurse 3 echoes this sentiment in her response:

I have learned I think in my experience that hospitals are businesses, and it is really important to say so. I feel like they are so concerned about profit. They are so concerned about what we can do to save money...there are times when it just feels like they see us more as a number sometimes over a person.

However, these realizations or the treatments received by employees did not significantly change nurses' beliefs about their workplaces. Rather, they expressed an understanding of the limitations their organizations faced in how they could respond. Most participants referred to their employers as having "tried their best" and the circumstances of the pandemic has not influence on organizational efficacy.



I will say they did handle like all of the changes. I think like, the CDC coming out with new guidelines, like so often they kept changing. I will say like they were on top of trying to make sure we were...like keeping up with those guidelines I guess as soon as possible.

(Nurse 3)

I believed that they responded well by, you know, quickly making changes to.... You know, to things that are already set on ground. They quickly rose up to respond to the threats, even though it was not you know, it was not real at the time. It was just, you know, a threat. And, you know, they fore...they forecasted that the numbers would go up. So, they already prepared so that in case the surge comes, at any time we are prepared, we are ready. We have the manpower. (Nurse 2)

Overall, none of the participants expressed a desire to leave either their organization or the nursing profession because of their experiences during the COVID-19 pandemic.

## **Discussion**

The purpose of this qualitative study was to understand the salient experiences of new nurses during the COVID-19 pandemic. New nurses were constrained to individuals within the first three years of their first nursing work experience. All the participants included here worked at a hospital and were employed full-time during the pandemic. Through one-on-one interviews conducted virtually, I examined participants initial motives for becoming nurses, as well as any changes to those motives as a result of nursing education and work experience. I questioned how initial career choice motives influenced their reactions to COVID-19 including their willingness to remain employed as nurses and work for their current employer. Of the five nursing participants interviewed, none showed a strong intent to quit that was motivated by experiences during the pandemic. Additionally, changes in their work environment caused by the pandemic, did not negatively affect participants' perceptions of the nursing profession. Contrary to my

expectations, participants expressed a renewed identification with the profession brought on by public attention and appreciation for their efforts on the frontlines of the fight against COVID-19.

The main findings in this study centered on the treatment of HCWs and their experiences within their respective organizations. While participants lived in different states and worked for different organizations, their experiences mirrored each other to a certain extent. Across the country, nurses lamented the lack of sufficient resources and adequate instrumental and emotional support from their employers (Daly et al., 2020). Health care organizations across the United States showed inconsistency in their implementation of policies and privileges for nurses such as paid time off, hazard pay to compensate for the risk involved in being a frontline worker, the availability of protective equipment for nurses and other HCWs. Some of the participants expressed having anxiety and feeling overwhelmed and stressed by the expectations placed on them as new nurses. The participants who expressed these feelings were all within their first years as RNs. For the two nurses in their second year, the inadequacy of protective equipment and pay was more salient, but the risk and fears of COVID-19 were not as great. This suggests that the longer nurses stay in the field, the better equipped they perceived themselves in handling health crisis. However, the expectations of their organizations in supporting them do not decline with either nurse tenure or organizational tenure.

While other research has explored the concept of essentiality for nurses (Hennekam et al., 2020), this theme also surfaces in the study with new revelations. Beyond the praise and recognition, being essential also implies some restraint in freewill for nurses who wanted to remain employed. As essential employees, nurses could not choose to only take care of non-COVID-19 patients, especially if they worked on hospital units in which such patients were

admitted. This theme surfaced in this study because the participants all worked in hospitals and three of them worked on the ICU floors where COVID-19 patients were frequently admitted. It is likely that for nurses in non-essential positions or those working in other specialized units like the neonatal or pediatric units, the need to care for COVID-19 patients was non-existent. However, the theme suggests that while there is a need to further promote nurses in the society to increase their recognition and appreciation, organizations should also focus on addressing the issues of psychological and mental distress nurses face in crises situations like this.

ICU nurses found that their work environment had changed because of the pandemic. They were now responsible for taking care of the “sickest of the sick” (Nurse 5), patients who could not speak or take part in their own care. The three ICU nurses in this study were all within their first year of nursing practice. Hence, the new responsibilities of their jobs proved both challenging and stressful to them. Participants worried about infecting patients and struggled with incompetency in the strange environment. Beyond their struggles, the participants believed that COVID-19 was an opportunity for their organizations to build efficacy, resilience, and to prepare for similar occurrences in the future. Participants showed compassion and understanding of the perceived inabilities of their organizations in combating COVID-19 which is ironic given the nature of the treatment and support they received from management in their organizations. It may be that since most of the participants chose nursing for selfless, altruistic reasons, they are able to rationalize negative experiences as long as the opportunity to provide care to those in need, remains accessible to them.

### **Limitations**

Generalizability of the findings and conclusions in this study is limited by the sample size. The increased demands (i.e., high patient ratios, longer hours at work, psychological effects

of continuous N-95 use) led to fatigue and mental health distress for nurses during the pandemic (Labrague, 2021; Peng et al., 2021). It may have also contributed to their unavailability to take part in research studies and can explain why this study involved a smaller sample. However, some characteristics of the sample lend validity to the conclusions drawn here. First, the nurses who took part in this study lived in separate locations in the U.S. This is important because the spread and severity of COVID-19 cases varied across different US states and cities. Hence, the fact that majority of the respondent echoed similar sentiments lend validity to the conclusions of this study. Also, new articles and a few other studies found the same problems that were mentioned by the participants in the current paper. Therefore, there is some convergence as to the experiences of nurses during the pandemic.

Furthermore, my findings may be biased towards female nurses who were the majority of participants in the study. Nursing is historically classified as a female-dominated occupation and men in nursing were viewed as an anomaly (Battice, 2010; Limiñana-Gras et al., 2013). However, male participation in the profession has grown over the last few years and men now account for 10 to 13 percent of the nursing workforce in western countries (Ashkenazi et al., 2017; Minority Nurse, 2021). Therefore, future studies should examine whether gender differences exist in nurses' and frontline workers' experiences during a health crisis.

## **Study 2: An Empirical Investigation of Career Choice and Turnover Intentions among New Nurses**

### **Data Sample and Collection**

Participants for this portion of the study were recruited using a variety of data sources. An initial sample was collected using a cross-sectional questionnaire administered by a data panel (QuestionPro). Additional participants were recruited from the graduate nursing program at the University of Texas at Arlington (UTA). Graduate students at UTA are required to have

completed at least two years of nursing work experience prior to their entry into the Master program. Finally, recruitment advertisements were placed with two nursing associations – the Texas Nurses Association (TNA) and the Southern Nursing Research Society (SNRS). A final sample of 115 responses from eligible participants were included in the model and hypothesis testing. A demographic overview of the participants indicated that 84.3% were female, 76% were employed full time, and most (66%) worked in a hospital setting (66.1%). Less than half of the participants (47.8%) had children who lived at home. Lastly, the data were skewed in favor of a genuine interest motive for the nursing profession with more than half of the participants (68.7%) indicated this motive.

## **Measures**

### ***Independent Variable***

**Career Choice.** This variable was measured using a scale of career choice motives identified by Jirwe and Rudman (2012) identified through a qualitative study of nursing students' interest in nursing as a profession. The scale is made of eight items representing individuals' interest in nursing as a career choice. Although there may be multiple reasons as to why individuals choose nursing, respondents were asked to indicate the top reason they chose nursing as a profession. Based on their response, participants were categorized into one of three groups “genuine interest,” “practical reasons,” or “default choice.”

### ***Moderation Variable***

**Organizational Efficacy.** A three-item scale was used to assess nurses' perceptions of their workplace's organizational efficacy. The three items represent the resilience sub-scale of the organizational efficacy scale developed by Bohn (2010). Participants were instructed to respond to the scale using only the information about their organization's actions during COVID-19. All three items were negatively worded and required reverse scoring prior to

analysis. Items were rated using a 5-point Likert scale (1 = “*Strongly disagree*” to 5 = “*Strongly agree*”). A sample item is “The organization has no hope of surviving in the future.”

### ***Dependent Variables***

**Organizational Turnover Intentions.** Participants’ intent to leave their organizations was measured using a three-item scale (Landau & Hammer, 1986). Participants provided ratings using a 5-point Likert scale (1 = “*Strongly disagree*” to 5 = “*Strongly agree*”). A sample item is “I am seriously thinking about quitting my job”. A reliability analysis was conducted prior to the use of this measure on model and hypothesis testing. Cronbach alpha calculated for the scale is .94.

**Professional Turnover Intentions.** Participants were asked to indicate how often they have considered leaving the nursing profession using a 5-point Likert scale (1= *Never* to 5= *Daily*) using a scale developed by Van der Heijden et al. (2007). Reliability reported for this scale in their study are Time 1 ( $\alpha = .89$ ) and Time 2 ( $\alpha = .85$ ). A sample item is “How often during the course of the past year have you thought of training for a profession other than nursing?”

**Control Variables.** Demographic information on participants of the employees such as age, gender, employment status, and work setting, were included as control variables.

## **Results**

First, I conducted preliminary analyses to determine descriptive statistics for all variables in the study using SPSS 26. The preliminary analyses revealed a small number of participants fell in either the “practical” or “default choice” career choice motives. Hence, I combined both motives into a single category labeled “non-genuine interest” which was compared to the “genuine interest” motive. This was done to achieve parsimony in data analysis and to generate comparable numbers in each group to conduct hypothesis testing.

**Common Method Variance.** The constructs used in the study were measured using a single self-report questionnaire. Hence, it is possible that common method bias influenced the responses given. To account for this during data collection, the scales were ordered randomly. During my analysis, I conducted a confirmatory factor analysis (CFA) using Mplus 8.2 to confirm the distinctiveness of the research variables. To test for the effect of common method bias, I conducted a Harmon's 1-factor test in which all items were specified to load on a single factor or measure. The fit indices from this model suggest that common method variance was not an issue with the data.

Then I conducted an independent sample t-test and regression analysis to test Hypothesis 1a and 1b. I used hierarchical regression analysis to test Hypothesis 2a and 2b about whether organizational efficacy moderates the relationships between initial career choice motives and organizational and professional turnover intentions. Means, standard deviations, reliabilities, and correlations for all variables are displayed in Table 3. Age was significantly correlated with two other control variables - employment status (negative;  $r = -.42$ ) and work setting (positive;  $r = .22$ ) and with organizational turnover ( $r = -.22$ ). Organizational and occupation turnover intentions were moderately correlated with each other ( $r = .48$ ) with organizational efficacy at  $r = -.53$  and  $-.34$  respectively. Career choice motives did not have significant correlations with either form of turnover intentions or organizational efficacy.

**Factor Analysis (EFA and CFA).** I conducted exploratory factor analysis of the multi-item measures included in the study (i.e., organizational turnover intentions, professional turnover intentions, and organizational efficacy). The results of principal axis factoring and varimax rotation confirmed the three-factor structure of the model (excluding career choice motives). Items on each scale indicated a factor loading score above .70.

## **Hypothesis Testing**

I tested both hypotheses using SPSS 26. The results are presented in Table 4. To test Hypotheses 1a and 1b, I conducted an independent samples *t*-test between the two career choice motive groups. Hypothesis 1a suggests that intent to turnover among nurses would vary based on career choice motives. The included Levene's test suggest that variance between both groups is not equal hence, the corresponding significance results on the second row was used to test Hypothesis 1a. The high p-value (i.e., greater than .01 and .05) fails to support the hypothesis. This implies that career choice motives did not influence any variance in organizational turnover intentions among respondents.

Similarly, Hypothesis 1b was tested using an independent *t*-test, in this case the Levene's test for the assumption of equal variances was not significant suggesting that the assumption of equal variances is acceptable. Hence, the figures on the first row of the output were used to test Hypothesis 1b. The high p-value (greater than .01 and .05) also fails to support the hypothesized relationship. Hence, professional turnover intentions did not vary based on career choice motives expressed by respondents. I also conducted a hierarchical regression analysis in which I entered control variables in Step 1, followed by career choice motives in step 2. I conducted this analysis twice for each dependent variable – organizational turnover intentions and professional turnover intentions. Career choice motives had no significant effect in predicting turnover intentions. Hence, the overall hypothesis put forth is not supported. This may be due to the skewed data in which more people indicated genuine interest motives (n = 79) compared to other reasons (n = 36).

To test for the interaction effect of organizational efficacy (Hypotheses 2a and 2b), I computed a new variable label (Career motives Dummy variable × Organizational Efficacy). Then, I included a third and final step in the analysis for hypothesis 1. In Step 3, I entered in the



OE variable and the computed interaction term. Again, the analysis was repeated to model the relationships for both forms of turnover intentions. The regression results are shown in Tables 4 and 5. The outcomes showed that there is no significant moderation effect on the relationship between career choice motives and organizational turnover intentions. Similarly, the relationship is not significant for the second dependent variable – professional turnover intentions. Hence, Hypotheses 2a and 2b are not supported.

Although not hypothesized, the results found a significant direct relationship between OE and organizational turnover intentions ( $b = -.54$ ,  $SE = .18$ ,  $p < .01$ ). This relationship implies that when health care organizations are perceived as being highly resilient and efficacious, employees are less likely to consider leaving. OE was also related to nurses' intention to leave the profession. The effect in predicting professional turnover intentions approached significance ( $b = -.28$ ,  $SE = .16$ ,  $p < .10$ ). The significance level at which this relationship is found is higher than acceptable standards, due to the small sample size. However, based the magnitude of the negative relationship ( $\beta = -.26$ ), there is some indication that efficacious organizations will be more likely to recruit and retain new entrants compared to organizations low in perceived efficacy.

Across the two models analyzed in Hypothesis 2, two control variables were related to organizational turnover intentions – age and type of shift worked. Older employees were less likely to actively consider leaving their current employer ( $b = -.02$ ,  $SE = .01$ ,  $p < .10$ ) and not working day shift increased intent to quit one's organization ( $b = .24$ ,  $SE = .12$ ,  $p < .05$ ).

## **Discussion**

I investigated the role career choice motives have on the new nurses' turnover intentions both from their organizations and the nursing profession overall, including how organizational efficacy moderates the relationship. In the current study, OE was measured as nurses' rating of

their organization's resilient trait and ability to survive downturns and crises such as the COVID-19 pandemic. Although both hypotheses were not supported, the results showed that organizational efficacy is an important predictor of turnover intentions among employees. This relationship has not been previously examined in the literature. Although the effects were stronger for organizational turnover intentions, OE also significantly predicted professional turnover intentions among nurses, implying that health care organizations have a key role in the alleviating nursing shortage.

The use of a single cross-sectional survey is a potential limit to the findings from the study. However, remedies were applied to minimize effect (Podsakoff et al., 2003). A Harmon's one-factor test and confirmatory factor analysis revealed the presence of multiple factors and measures in the data, indicating that common method bias is not an issue (Podsakoff et al., 2003). Although structural equation modeling is another suggested method for minimizing CMV (Podsakoff et al., 2003), it was not utilized here because of the simplicity of the model and the fact that moderation tests were required.

### **General Discussion**

The current paper focused on a sample of new nurses as they addressed challenges brought on by the COVID-19 pandemic. The pandemic led to positive experiences for nurses as they rose to the forefront of public attention as essential workers who bore great responsibility for patient care and safety (Hennekam et al., 2020). However, as the findings here point out, the costs of the 'essential' acclaim was the inability to refuse certain responsibilities or patients. This lack of volition has increased burnout, anxiety, and distress among nurses, which are documented in several studies (Labrague & De los Santos, 2020; Sampaio et al., 2020; Wang et al., 2020). In two studies, I considered the effects nurses' initial career choice motives have on

their reaction and behavioral outcomes during a crisis. The selection of career choice motives as a predictor was made on the premise that the time lag between occupational choice and nursing practice for newly graduated nurses had not been extensive. Hence, initial choice motives may still influence nurses' behaviors and work outcomes. Current findings, however, do not support these assumptions. Nonetheless, it is necessary that a clearer understanding of various motives be developed by organizations as they structure their performance management and retention strategies for all employees. Typically, nursing research has focused on occupational calling as a vital factor influencing employee outcomes. However, calling is only one of three ways proposed by Wrzesniewski et al. (1997) in describing individuals' views or orientations to their work. For some, the choice of a nursing career may be predicted by other factors like the expected compensation, work flexibility, the lack of alternatives among others (Jirwe & Rudman, 2012). This implies that health care organizations developing or modifying their performance management systems for effective retention of nurses consider the broader motives nurses have beyond choice.

Aside from the focus on choice and motives in career decision, the impact of crisis and uncertainty in work was highlighted in this paper. In-depth interviews revealed concerns about safety, fear, anxiety, downsides of being essential, and much more. The findings from the qualitative study raises the need for policy makers to develop broad regulations that ensure the well-being and protection of all nurses and other HCWs regardless of their individual organizations or locations. Health care organizations also need to re-assess the ways in which they show their appreciation of their HCWs. Among interview participants, only a few mentioned receiving any verbal support or encouragement from the leadership in the organization. Instrumentally, all participants cited the lack of adequate resources for them to care

for patients while also protecting themselves. Hence, organizations need to improve on the alignment between their verbal communication and actual implementation of supportive practices for their employees.

Although the study was structured to focus on the nursing context, there is opportunity for it to be applied to other work settings, particularly high-risk occupations. High-risk occupations often involve the provision of life altering services to the public, which underscores the importance of retention employees in those occupations. A comprehensive understanding of workers' experiences in high-risk occupations as well as choice motivations will help provide organizations with better strategies for ensuring adequate satisfaction and retentions of employees.

The implications of the COVID-19 pandemic to health care industry extend beyond current employees to cover nursing students. Press and research articles highlight changes to the nursing program curriculum during the pandemic including the cancellation of clinical opportunities for students. While such measures were taken to limit the spread of the virus, it also eliminated students' realistic preview of the nursing work environment prior to their transitioning to nursing practice. Hence, nursing students graduating within the next year may face several challenges with basic nursing tasks. Health care organizations should be prepared to offer courses and resources to train new employees on-the-job on such tasks. This is important to enable nurses' transition into the work environment and develop effective coping resources through their knowledge of the job.

### **Future Research Directions**

Among the reasons cited for the nursing shortage, the high rate of turnover among new nurses is a concerning one. An equally crucial factor predicting nursing shortage is the level of supply from nursing education programs. Some studies have found that the interest in nursing

schools has declined over the last few years (Neilson & Jones, 2012). A pandemic situation like COVID-19 which exposes the inadequacies of health care organizations, and the dangers associated with the profession to future nurses raises concern of the attractiveness of nursing and issues with nurse retention (Morin, 2020; Rosa et al., 2020). Therefore, future research should examine impact to the career choice intentions of pre-nursing and high school students. Studies also document the struggles of nursing students with their education during the pandemic. Students experienced an unexpected closure of schools and transition to online classes and elimination of clinical programs which are important to their learning (Aslan & Pekince, 2020; Ulenaers et al., 2021). Consequently, investigation is needed into the salient experiences of nursing school students and potential nursing students during the pandemic. It would be important to compare the experiences of currently employed nurses and students enrolled in nursing programs to understand the reach of organizational efficacy on individuals' behavioral intentions.

Future studies should also examine career choice motives at different time periods starting with entry into nursing education until at least two years of nursing transition. An extensive longitudinal study like the one proposed will enable researchers to identify boundary conditions and mediators of the effects of career choice motives on nurses' attitudes and behavior. Furthermore, the relationship between organizational efficacy and turnover requires more scrutiny to map out a comprehensive model of direct and indirect relationships between both constructs.

The COVID-19 thrust new entrants into a markedly different nursing work environment which, based on interviews with participants, was more fast-paced and isolated. There is current no clarity as to what the future of work in nursing will look like. However, the introduction of a

vaccine and the decrease in COVID-19 cases implies upcoming adjustments. Future studies should consider how new nurses who began employment during COVID-19 cope with these subsequent changes in their workplace and its impact on their attraction to the nursing profession, and turnover intentions. Studies should investigate the best practices and resources for health care organizations to implement in achieving an effective process of transition and adaptation.

### **Conclusion**

The present study attempted to understand the relationship between new nurses' career choice motives and their turnover intentions during a crisis through qualitative interviews and survey data. The lack of protection and support for HCWs was salient among participants in the qualitative study. However, choice motives and an overwhelming love for nursing may have negated the effect of those negative experiences on nurses' intentions to leave their organization and/or occupation. While preliminary findings from the empirical study show no evidence of a relationship, there is opportunity for future research to draw out any nuances in the proposed relationships. Although not hypothesized, organizational efficacy (specifically, perceived sense of resilience in the organization) was found to directly influence turnover intentions for employees. This is another variable that calls for future research investigation. In general, it seems that during crisis, employees scrutinize their organizations behavior more intensely. Hence, organizations should seek to be more prepared to care for and support their employees at those times.

### **Chapter 3: Professional Mechanisms Linking Career Choice and Turnover Intentions**

Turnover is a significant problem contributing to the current global shortage in nursing (Duffield et al., 2014). It ranges from moves between specialty areas or nursing units (Krausz et al., 1995) to leaving a job or organization (Hayes et al., 2006; 2012; Mazurenko et al., 2015) to the more finite withdrawal from the profession (Hayes et al., 2006; 2012; Lynn & Redman, 2005; Mazurenko et al., 2015). Turnover has significant organizational costs and severe consequences for the efficiency of the entire nursing profession. Recent events like the COVID-19 pandemic (Mo et al., 2020; WHO, 2020a) and the rapidly ageing population which increases the demands for HCWs (Beurhaus et al., 2009), underscore the need for organizational action in addressing nurse turnover and retention (Zhu et al., 2020). Compared to other members of the nursing workforce, turnover is more prevalent among new nurses, described as individuals within the first two to three years of initial nursing work experience (Barron & West, 2005; Kramer et al., 2013; Kovner et al., 2010). The turnover of new nurses creates a skill gap that is further heightened by the retirement of older, more experienced nurses (Buchan et al., 2015). Invariably, the nursing profession is struggling to cope with the loss of valuable human resources (Sandler, 2018) required to ensure patient safety.

Among the factors being examined in relation to turnover, career interests (Jirwe & Rudman, 2012; Price et al., 2018; Price, 2009) as a predictor of choice and turnover is noteworthy. Career interests and career choice motives offer an evaluation of nurses' mindset and may also provide insight into the level of effort they are willing to exert for the success of their profession and career. A previous study consolidated nursing career motives into three categories: "genuine interests," "practical reasons," and "default choice." Genuine interests refer to prosocial (helping) or altruistic (desire) reasons for becoming a nurse (Jirwe & Rudman,

2012). The most mentioned prosocial motive is the desire to help, and care for others. Practical reasons include the availability of flexible work schedules and adequate compensation in nursing. Default choice in nursing implies that individuals were not actively engaged in the search for a career/academic major. Often, nursing students enter the program based on a recommendation from family, friends, or a school advisor (Jirwe & Rudman, 2012). Such choice connotate a lack of, or a limited thought process compared to what is undertaken by individuals with a practical or genuine interest motive.

Prosocial motives and altruistic values frequently dominate the publicly held views of the nursing profession (Mooney et al., 2008; Price, 2009; Price et al., 2018; While & Blackman, 1998). Nurses are perceived to hold a calling to their profession (Wrzesniewski, 2012) that motivates their values. Hence, there is an expectation that nurses display unwavering dedication to the profession. However, this view fails to account for the fact that the nursing profession itself, emphasizes altruistic values as part of its socialization process (Haigh, 2010; Price et al., 2018; Sellman, 2011). According to institutional theory, various professions have established norms and expectations that are instilled into their practitioners through a process of socialization (DiMaggio & Powell, 1983). The nursing profession as pioneered by Florence Nightingale bears an oath to the safety and well-being of the society (McBurney & Filoromo, 1994). Therefore, public perception may only capture the image of the nursing profession as put forward by its regulating bodies (Haigh, 2010) rather than the true motives of individual nurses. More so, the nursing profession is very high-risk, and workers deal with a myriad of dangerous encounters from patient violence and aggression (Edmonson & Zelonka, 2019; Johnson, 2018) to the exposure to infectious diseases. These experiences and the overwhelming responsibility for



patients may weaken altruistic values (Miers et al., 2007). As such, a comprehensive examination of career choice motives and their effect of nurses' work outcomes is warranted.

The purpose of this study is to understand how career choice motives directly influence new nurses' work attitudes and indirectly, turnover intentions. Among factors predicting nurse turnover, professional commitment (PC) and self-efficacy are relevant to address among new nurses for several reasons. One, new nurses often experience a reality shock when participating in the workforce post nursing-education. The stark realities of the nursing work environment compared to expectations (Duchscher, 2008; Read & Laschinger, 2015; Scott et al., 2008) may lead to them questioning their career decisions and influence turnover decisions. For instance, during the first two years in nursing practice, nurses struggle with an overwhelming workload, workplace incivility from multiple sources (Jackson et al., 2002; Layne et al., 2019; Magnavita & Heponiemi, 2011), and often a realization that their compensation is not sufficient given the required risks on the job (Chan et al., 2013). They also cope with interrole conflict stemming from incompatible demands between their work and home (family/personal lives) domains (Greenhaus & Beutell, 1985; Grzywacz et al., 2006). These factors can trigger negative perceptions of nursing as well as the current work organization and weaken professional commitment (Brown et al., 2018). To address the research purpose, the tenets of the social cognitive career theory (SCCT) and self-determination theory (Deci & Ryan, 2000) are applied.

SCCT (Lent et al., 1994; Lent et al., 2002) posits that both situational and individual factors predict individuals' career outcomes which include commitment and turnover decisions (Chang et al., 2019a; Chang et al., 2019b). The theory has been previously applied to studying career decisions among nursing students (Abrahamsen, 2015; Thungjaroenkul et al., 2016) and nurses' professional commitment (Chang et al., 2019a; Chang et al., 2019b). SCCT found that

career choice and career outcomes can be predicted by an individual's outcome expectations (Lent et al., 1994) which are inferred from stated career choice motives. For example, genuine interest motives imply that nurses want an environment in which they are needed to provide care. Practical motives often reflect an expectation of a certain level of pay and flexibility in work. Therefore, it is likely that when nurses experience a reality shock (Kramer, 1974) post-nursing education in which their expectations are misaligned with reality, their commitment to the nursing profession starts to wane. The SCCT model also states that self-efficacy is a direct predictor of career interests and an indirect predictor, through career outcome expectations (Lent et al., 1994; Lent & Brown, 2019). In a different study, Thungjaroenkul et al. (2016) found that self-efficacy was negatively related to nursing students' intention to quit the education program. In the current study, the SCCT framework is adapted to study the relationship between occupational coping self-efficacy (OCSE) predicted by career choice motives on the professional commitment and turnover intentions of new nurses.

This study offers key contributions to nursing research. First, the study examines multiple career choice motives as opposed to the dominating view of altruistic or prosocial values (Newton et al., 2009; Nseje, 2015; Wrzesniewski, 2012) thereby extending current research in that area. Second, the theoretical application of SCCT to individual and organizational outcomes of employed nurses (as opposed to nursing students) to date, has been limited (Chang et al., 2019a; Chang et al., 2019b). Hence, this paper also extends the existing application of SCCT in nursing research. Specifically, the current study applies the SCCT framework to investigating career decisions among new nurses who are inexperienced and grappling with their abilities as a nurse (Pellico et al., 2008; Newton & McKenna, 2007). SCCT is an appropriate framework given that nurses make different decisions and progressions over the course of their career (from RNs

to nurse managers, nurse practitioners, nurse supervisors, etc.). Lastly, the paper expands on current research investigating OCSE among employees. Prior to this study, the study of OCSE has been limited to understanding its effect on burnout, psychological well-being, and employee retention. Here, OCSE is linked to a positive work outcome – professional commitment among nurses. The theoretical model hypothesized below is presented in Figure 2.

## **Literature Review**

### **Professional Commitment**

Studies have found that strong commitment to a profession is likely to increase retention in that profession (Lee et al., 2000). Furthermore, PC can also influence employee retention in an organization through various mechanisms (Cohen, 2002). PC is defined as an alignment between personal beliefs and the goals of a profession that causes an employee to devote greater efforts on behalf of the profession (Teng et al., 2007). In nursing, PC is one of the crucial factors studied (Jourdain & Chênevert, 2010). It is second only to job satisfaction as a prediction of organizational turnover and turnover intentions among nurses (Knoop, 1995; Lu et al., 2012). PC is linked to higher levels of professional identity and devotion to nursing (Carson & Bedeian, 1994). It is also linked to other organization- and work-related outcomes for nurses (Meyer et al., 1993). To date, nursing research has not focused much on how commitment differs among different categories of nurses and the organizational or individual factors influencing such variance. An exception by Nseje (2015) examined prosocial motives alone in a study of the commitment of nursing students three years after graduation. Nseje (2015) found that prosocial motives did positively predict nursing commitment, however, other career choice motives exist that may exhibit varied relationships with commitment.

SCCT (Lent et al., 1994) states that self-efficacy perceptions and outcomes expectations influence career decisions and future work outcomes (i.e., performance). Individuals typically choose a profession in which they believe themselves to be capable to accomplishing the necessary job duties and responsibilities (Bandura, 1977). This belief is developed through four sources – direct experience, modeling other’s behaviors, persuasion from other people, and one’s assessment of physical and emotional capabilities (Bandura, 1989). The reasons for entering in a profession can help indicate individual’s strongly held beliefs and outcome expectations. Hence, it is likely that nurses’ outcomes expectations should vary based on the choice motives expressed.

The SCCT model directly examines one’s commitment to a chosen profession while accounting for the changes due to the positive or negative experiences with the profession. As nurses enter the workforce, their daily experiences help to shape the reality of the profession and can trigger comparisons with their previous expectations. Given that earlier outcome expectations are influenced by initial choice motives, such motives are also expected to play a role in nurses’ interpretation of their experiences and their attitudinal reactions to it. Additionally, SDT argues that autonomy in decision making will influence work outcomes for an individual (Deci & Ryan, 2000). Autonomy is speculated to vary based on nurses’ expressed career choice motives. This relationship is expected to be stronger for those with very high or very low levels of autonomy compared to individuals with moderate autonomy. Therefore, I make the following hypotheses:

Hypothesis 1a. Professional commitment (PC) of new nurses will vary based on their career choice motives such that, individuals with career motives indicating high levels of

autonomy will be more committed to nursing than those indicating a ‘practical choice’ or ‘default choice’ motive.

Professional commitment has been linked to various work outcomes including turnover. Studies show that nurses’ physical attachment or affection to the profession can influence their retention or professional turnover intentions (Chang et al., 2015; Guerrero et al., 2017). Although this link has been established in research, it is important to acknowledge and reiterate in the present study. Additionally, I examine the relationship between professional commitment and organizational turnover intentions with the following hypotheses:

Hypothesis 1b. PC is negatively related to organizational turnover intentions among new nurses.

Hypothesis 1c. PC is negatively related to professional turnover intentions among new nurses.

### **Occupational Coping Self-Efficacy**

Self-efficacy is a component of social cognitive theory (SCT) proposed by Bandura (1986). It is defined as an individual’s confidence in their ability to perform the specific duties of a job (Bandura, 1977; 1986). Self-efficacy has been linked to individual performance, goal achievement, and career success (Avey et al., 2008). Although there is a general measure of self-efficacy, it can be situation specific construct, meaning that a person may show high efficacy in one situation and have low efficacy in another (Cassidy & Eachus, 2002; Kurbanoglu, 2003). The original SCCT demonstrated the role of general self-efficacy (GSE) in a person’s career interest and choice (Lent et al., 1994). Following career training and education however, situation specific self-efficacy may be more appropriate. In the current study, I focus on occupational coping self-efficacy (OCSE) which is an individual’s beliefs about their ability to deal with situational stressors in their occupation (Bandura et al., 1985). OCSE differs from GSE

and is in line with suggestions that the assessment of self-efficacy beliefs should be tailored to a specific domain of functioning that is the object of interest (Salanova et al., 2002). Pisanti et al. (2015) found that employees high in OCSE viewed job demands positively as opportunities for professional development. They were also more likely to persist and invest efforts in overcoming work difficulties (Schwarzer & Knoll, 2003). Within nursing research, OCSE examines the ability of nurses to cope with the challenges of their work environment, such as work overload and interpersonal conflicts (with e.g., coworkers, patients) (Laschinger et al., 2015; Pisanti et al., 2008).

OCSE is particularly important for new nurses given the documented struggles with nursing job demands within the first few years in practice. In an examination of OCSE, Read and Laschinger (2017) did not find any differences between new nurses from accelerated nursing programs and those from traditional nursing programs. They concluded that the prior work or academic experiences of individuals in accelerated nursing programs did not reduce the reality shock experienced post-entry into nursing practice. Other studies have considered the role of OCSE in nurses' experiences of burnout and authentic leadership at work and their turnover intentions (Fallatah et al., 2017; Laschinger et al., 2015; Livne & Goussinsky, 2018). Fallatah et al. (2017) also found that OCSE predicted low turnover intentions among new graduate nurses. However, the role of career choice motives in nurses' confidence in their ability to cope with job demands is unclear.

Of the three motives identified by Jirwe and Rudman (2012), they found that genuine interest was the less associated with feelings of stress among nursing students in the first and final year of nursing education. On the other hand, students with default choice motives were more stressed and experienced burnout. They attribute the perceived stress and burnout to the

lack of autonomy in default choice motives, which is counter to the basic human motivational needs of self-determination theory (Deci & Ryan, 2000). Autonomy in the selection of a career may influence one's perceived abilities on the job leading to their career choice. However, the influence of initial choice motives on perceived ability and self-efficacy following formal training is unclear. I investigate this relationship through the following hypotheses:

Hypothesis 2a: New nurses' occupational coping self-efficacy (OSCE) will vary based on initial career choice motives such that those with genuine interest motives will report higher levels of OSCE compared to those with non-genuine interest motives.

Hypothesis 2b: There is a negative relationship between OCSE and organizational turnover intentions among new nurses.

Hypothesis 2c: There is a negative relationship between OCSE and professional turnover intentions among new nurses.

Current studies on the utility of OCSE focus on its effect in reducing burnout and exhaustion among employees (Laschinger et al., 2015; Pisanti et al., 2008; Pisanti et al., 2015) and its relationship with job turnover intentions (Fallatah et al., 2017). There has been no investigation of OCSE's effect on other attitudinal or behavioral work outcomes (an exception is Blaique's (2021) discussion of coping self-efficacy as a predictor of occupational commitment among women in STEM). However, there are other studies tying general self-efficacy to commitment among nurses. In their application of SCCT, Chang et al. (2019b) found that self-efficacy was related to the affective and normative commitment through outcome expectations and career interests. Here, I suggest that a relationship exists between OCSE and professional commitment:

Hypothesis 2d: There is a positive relationship between OCSE and the professional commitment of new nurses.

### **Indirect Relationships**

In the previous section, I developed hypotheses testing the relationships between choice motivates to PC (Hypothesis 1a) and OCSE (Hypothesis 2a), and the established relationships between PC, OCSE, and turnover intentions. Based on a causal inference for a moderation process (Baron & Kenny, 1986), I expect that PC and OCSE to mediate the effect of initial career choice motives on turnover intentions. Specifically, nurses with “genuine interest” motives (more autonomy) will be more committed to the nursing profession and will exhibit lower turnover intentions compared to those with non-genuine interest motives. Similarly, new nurses with genuine interest motives will expressed higher levels of OCSE and in turn be less likely to consider leaving their organization or the nursing profession. Together, I hypothesize the following:

Hypothesis 3a: PC will mediate the effect of initial career choice motives on organizational turnover intentions.

Hypothesis 3b: PC will mediate the effect of initial career choice motives on professional turnover intentions.

Hypothesis 4a: OCSE will mediate the effect of initial career choice motives on organizational turnover intentions.

Hypothesis 4b: OCSE will mediate the effect of initial career choice motives on professional turnover intentions.

Based on the conclusions of previous on the relationship between OCSE and PC, I propose a mediating effect in which career choice motives indirectly influence nurses’ turnover intentions occur sequentially through OCSE and PC.



Hypothesis 5a: OCSE and PC will sequentially mediate the relationship between initial career choice motives and new nurses' organizational turnover intentions.

Hypothesis 5b: OCSE and PC will sequentially mediate the relationship between initial career choice motives and new nurses' professional turnover intentions.

## **Methodology**

The hypothesized model was tested using data that were in a previous study (Ogunyomi, 2021) which investigated the reactions of new nurses during the COVID-19 pandemic. The dataset included additional variables, some of which are the focus of the current study. The current model and the previous one share a few overlapping variables which are career choice motive, organizational turnover intentions, and professional turnover intentions. The focus of the current study is on graduate nurses' encounters and outcomes during the transition to practice under normal environments unlike the previous study which focused on unique or crisis situations like the COVID-19 pandemic. The eligibility criteria (information in Appendix) were used to eliminate unwanted responses, leaving a final sample of 115 responses for model and hypotheses testing.

## **Measures**

**Career Choice.** This variable was measured using a scale of career choice motives identified by Jirwe and Rudman (2012) identified through a qualitative study of nursing students' interest in nursing as a profession. The scale is made of eight items representing individuals' interest in nursing as a career choice. Although there may be multiple reasons as to why individuals choose nursing, respondents were asked to indicate the top reason they chose nursing as a profession. Based on their response, participants were categorized into one of three groups "genuine interest," "practical reasons," or "default choice." However, the previous study

revealed a skewness of data on this construct such that more people indicated being in nursing for genuine reasons compared to the other two motives. Hence, a dichotomous dummy variable was used to represent career choice in this study. Nurses were categorized based on their career choice motives as either “1 = Genuine interest” or “0 = non-genuine interest.”

**Professional commitment.** A four-item scale by Lachman and Aranya (1986) was used to assess nurses’ psychological attachment to their profession. The scale has been previously utilized in a study by Teng et al. (2007) who reported composited reliability for this scale as .89. Reliability for the items in the scale ranged between .83 and .89. A sample item is “I feel very loyal to the nursing profession”. Participants provided ratings using a 5-point Likert scale (1 = “*Strongly disagree*” to 5 = “*Strongly agree*”).

**Occupational coping self-efficacy.** This construct is measured using a nine-item scale developed by Pisanti et al. (2008) geared towards nurses. The scale asks respondents to respond a scale from 1 (Not well at all) to 5 (Extremely well). The overall instruction asked respondents to state the ease at which they feel they can cope with different situations faced by nurses in their jobs. A sample item is “...difficulties with patients”. The scale consists of a total of nine items which load on two subfactors – coping with general nursing burden (items 1- 6) and managing relational difficulties (items 7 -9). The Cronbach alphas for the subscales are .77 and .79, respectively.

**Organizational Turnover Intentions.** Participants’ intent to leave their organizations was measured using a three-item scale (Landau & Hammer, 1986). Participants provided ratings using a 5-point Likert scale (1 = “*Strongly disagree*” to 5 = “*Strongly agree*”). A sample item is “I am seriously thinking about quitting my job”. A reliability analysis was conducted prior to the

use of this measure on model and hypothesis testing. Cronbach alpha calculated for the scale is .94.

**Professional Turnover Intentions.** Participants were asked to indicate how often they have considered leaving the nursing profession using a 5-point Likert scale (1= *Never* to 5= *Daily*) using a scale developed by Van der Heijden et al. (2007). Reliability reported for this scale in their study are Time 1 ( $\alpha = .89$ ) and Time 2 ( $\alpha = .85$ ). A sample item is “How often during the course of the past year have you thought of training for a profession other than nursing?”

**Control variables.** In previous studies of commitment and self-efficacy, the effect of gender has been considered pertinent (Nseje, 2015), therefore it is included in this study as a control variable where “0” is Female and “1” is Male. Age is typically included in the study of work commitments (Lee et al., 2000). Hence, age is included as control variable. Prior research has found that employment status can influence commitment among employees. It may also influence the ability to understand one’s job and lead to variance in perceived efficacy. Hence, employment status (“0 = part-time” and “1 = full time”) is included as a control variable. Lastly, work setting is included to understand the effect the hospital setting has on nurses’ work outcomes compared to other health care facilities.

## Results

Preliminary analyses were conducted to determine descriptive statistics for all variables in the study using SPSS 26. These analyses include means, correlation coefficients, standard deviations, and internal reliabilities of each measure, found in Table 6. Data was collected using a single survey questionnaire which may have influenced the responses provided by participants. To account for the possibility of common method bias, I conducted a Harmon’s 1-factor test in

which all items were specified to load on a single factor or measure. The fit indices from this model suggest that common method variance was not an issue with the data.

I also conducted exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to evaluate the distinctness of the research variables. EFA was conducted using SPSS 26. The result of a principal axis factoring with varimax rotation returned 5-factor model with a second-order construct for OCSE. The factors loadings for the OCSE-OB were low with three items exhibiting a factor score of less than .50. These items were removed prior to CFA. Using Mplus, I ran CFA with multiple alternative models. I compared the research model with other alternative models by adapting the number of factors. Due to poor item loading, the OCSE-OB sub scale was not included in the analyses. The model without the OSCE-OB sub scale demonstrated good fit with the data ( $\chi^2(59) = 111.79$ , CFI = .96, TLI = .94, SRMR = .06, BIC = 3,497.39), and was used in hypothesis testing. Table 7 provides unstandardized estimates from the path analysis conducted.

### **Hypothesis Testing**

Hypotheses 1a and 2a were tested by conducting an independent sample t-test in SPSS 26 and running path analyses. The remaining hypotheses were tested with path analyses using Mplus 8.2. Path analysis used bivariate correlations of observed variables to estimate the strength of relationships identified in a model (Hair et al., 2006). It is useful for simultaneously testing relationships in multiple linear regressions. Control variables and direct effects that were not hypothesized were included in the path analysis and the results are presented below.

The result of a Levene's *t*-test shows that profession commitment will vary among new nurses due to their initial career choice motives. Further, the linear relationship between career choice motives as a predictor of professional commitment was significant ( $b = .47$ ,  $SE = .18$ ,  $P < .01$ ). Hence, Hypothesis 1a is supported. Hypotheses 1b and 1c suggested a negative relationship

between professional commitment and both forms of turnover intentions. Professional commitment is inversely related to organizational turnover intentions ( $b = -.50, SE = .18, P < .01$ ) supporting Hypothesis 1b. Similarly, PC is inversely related to professional turnover intentions ( $b = -.72, SE = .14, P < .01$ ), therefore Hypothesis 1c is also supported.

Similar tests were conducted to assess the ability of career choice motives to predict variances in perceived coping self-efficacy among new nurses, specifically with workplace relationships. Based on both the Levene's *t*-test and linear regression from path analysis, there is no significant relationship between career motives and OCSE-RB. Hence, Hypothesis 2a is not supported. Furthermore, OCSE-RB did not have any significant relationship with either organizational turnover intentions or professional turnover intentions. Therefore, no support was found for Hypotheses 2b and 2c. Hypothesis 2d examines the relationship between OCSE and professional commitment. The OCSE-RB component of coping self-efficacy demonstrated a significant positive relationship with PC in the path analysis ( $b = .24, SE = .11, p < .05$ ). Hence, Hypothesis 2d was supported.

The indirect relationships between career choice motives and both forms of turnover intentions through professional commitment and OCSE was also tested using path analysis. I calculated 95% confidence intervals (CI) with 5000 bootstrap iterations to evaluate significance. Bootstrapping helps to reduce sampling error for the confidence intervals (Hayes, 2009). Hypothesis 3a which suggests an indirect effect of career choice motives on organizational turnover intentions through professional commitment was supported (indirect effect =  $-.23, SE = .12, 95\% \text{ CIs } [-.55, -.05]$ ). Hypothesis 3b was also supported as career choice motives had an indirect effect on professional turnover intentions through PC (indirect effect =  $-.34, SE = .14, 95\% \text{ CIs } [-.65, -.11]$ ). Both Hypothesis 4a and 4b were not supported and the relationships

between career choice motives and turnover intentions were not mediated by coping self-efficacy. The final hypothesis states that the effect of career choice motives on turnover intentions are indirect through both OCSE and PC. The results of the path analysis are not significant for these relationships; hence Hypothesis 5 is not supported. Figure 4 provides a diagram of the path analysis with the hypothesized paths and significant direct effects that were not hypothesized. Also, a summary of indirect effects can be found in Table 8.

### **Discussion**

Nursing career choice motivations vary and evolve across individuals and generations (Price, 2009; Price et al., 2018). Therefore, it is imperative that studies continue to understand what they are and how they impact nursing work outcomes. The current study found that commitment to nursing (PC) can be influenced by one's initial career choice motives. However, career choice motives did not have the same effects on OCSE. New nurses that had entered the profession for genuine or altruistic motives were more committed than those in the profession for more practical or passive motives. Genuine interests comprise the desire to learn about the health care field and to help care for those that are sick. Professional commitment also fully mediated the relationship between career choice motives and nurses' turnover intentions. This is considered a full mediation as a prior study using the same dataset did not find any direct relationship between career choice motives and either organizational or occupation turnover intentions (Ogunyomi, 2021). However, in the current study, there was moderate significant direct (negative) relationship between career motives and professional turnover intentions.

The indirect effect was stronger for occupation turnover intentions than organizational turnover intentions. This is expected given that professional commitment measures attachment to nursing and not one's individual organization. This relationship is explained by the focus-

congruence approach (Klein et al., 2012) which states that predictors are more strongly related when measured at the same level of focus as the target dependent variable. Career choice motives are therefore important for organizations to understand and support as nurses enter the workforce. The results show that recruiting individuals with more altruistic motives may be beneficial for improving nurse retention and commitment, thereby improving patient safety concerns in health care.

Furthermore, I tested and found support for the existence of a positive relationship between occupational coping self-efficacy (OCSE) and professional commitment, specifically the relational burden sub-scale of OCSE. Overall OCSE refers to the ability to cope with the demands of one's job. For nurses, demands often encompass high workload, difficult, violent, and aggressive patients, uncivil co-workers and supervisors, and disrespectful physicians who enact hierarchical structures rather than collaborate with nurses (Churchman & Doherty, 2010; Rudland & Mires, 2005). Hence, the positive relationship found supports the notion that when organizations help nurses adapt to their work environment, they will reciprocate by increasing efforts and attachment to work. Organizations can capitalize on this knowledge and create opportunities for new employees to increase their efficacy.

### **Directions for Future Research**

Although the current study generated limited results and conclusions, it presents some opportunities for future investigation. First, future studies can examine the role of socialization processes which occur during nursing education and on-the-job in increasing nurses' PC and OSCE. Professional socialization is the process through which individuals learn about their occupation (Dorcy, 1992; Price et al., 2018). It is related to career outcomes like job satisfaction and retention (Mackintosh, 2006). Previous research has stated that nursing education promotes

and strives to instill altruistic values in its members which may influence the extent to which initial motives remain intact during various career stages. However, prior conclusions from a qualitative study (Price et al, 2018) suggests a complicated relationship, necessitating further investigation.

Laschinger and colleagues in two different studies, identified authentic leadership as a positive predictor of OCSE through indirect effects of personal and organizational identification, and various aspects of the nursing work-life (Fallatah et al., 2017; Laschinger et al., 2015). It is possible that OCSE also influences organizational commitment, or it may only influence professional outcomes based on a focus-congruence perspective. Future studies should seek to clarify the effects on organizational and professional outcomes through empirical investigations. In general, this finding highlights the need for more studies on the impact of OCSE in employee behavior and attitudes beyond its confirmed effect on burnout and turnover intentions.

Beyond organizational leadership, various studies, especially qualitative ones, have investigated the coping behaviors and mechanisms deployed by nurses on the job. These studies focused on understanding how coping strategies influence the burnout and retention of nurses. However, there is little information on the strength and effectiveness of individual coping mechanisms. Future research on coping strategies should consider which ones more strongly influence perceived coping and general self-efficacy. Additionally, to what extent do career choice motives and career expectation influence an individual's choice of coping mechanism or style? Addressing these questions may inform organizations as to the training and support programs that are necessary and more relevant for their employees.

### **Limitations**

As with the previous study using the same dataset (Ogunyomi, 2021), career choice motives were skewed with more respondents indicating genuine interest motives compared to



other motives. With nursing, this is a common occurrence as individuals express altruistic or genuine motives more often than any other reasons (Jirwe & Rudman, 2012; Price et al., 2018). However, the small sample size may amplify effects in the skewed data. Hence, future studies should attempt collection of responses from a larger sample size. Second, the study tests out mediation with cross-sectional data. Although tests were conducted to ensure the absence of common method variance, study findings can be improved with longitudinal data in which different measures are collected at separate time periods. For instance, nursing students could be surveyed at the beginning of nursing education (i.e., 3<sup>rd</sup> year or Junior year of college) to understand career choice motives with subsequent data collection efforts focused on work outcomes following entry into nursing practice. The non-significant relationship between career choice motives and OCSE may be due to the inability to utilize the full OCSE scale. Due to poor item factor loading scores, the OCSE-OB subscale was omitted from analyses. However, this subscale may be more relevant given the nature of the research. Jirwe and Rudman's (2012) categorization of career choice motives, focused on individuals' attraction to the duties and responsibilities of nurses. Their approach is similar to other studies and findings regarding career choice in nursing (Mooney et al., 2008; Price et al., 2018; While & Blackman, 1998) implying that prospective work relationships are not relevant to initial career choice motives. Therefore, the OCSE-OB subscale would have been more appropriate in this study.

### **Conclusions**

The purpose of this study was to understand the role of initial career choice motives on turnover intentions in nursing, through specific mediating variables relevant to newly licensed nurses. Findings support the assumption that career choice motives have lingering effects on individuals' attitudes, perceptions, and career decision in later stages of their career. Hence, more

understanding of choice motives and ways in which to engage new nurses through those motives is needed in organizations.

## **Chapter 4: An Exploration of Organizational Efficacy in the Nursing Work Environment: Individual-Level Antecedents and Outcomes**

In a dynamic, competitive global business environment, organizations are faced with a myriad of challenges and difficulties that often prove detrimental to their continued existence. Each industry has its own unique challenges that it needs to address. Within the healthcare industry, the constant turnover of nurses and an overall shortage of trained nursing staff is the most significant. The nursing shortage and nurse turnover create significant financial costs for organizations and overall, impede the ability of the nursing profession to deliver quality care to patients and society (Buchan & Aiken, 2008; Hayes et al., 2012; O'Brien-Pallas et al., 2006). The extant literature has discussed numerous factors that influence nurses' turnover intentions (Hayes et al., 2006; Hayes et al., 2012; Yildiz et al., 2021). However, calls in research ask for more enlightenment on the issue of nurse turnover especially by new graduate nurses. Understanding of the transition period from nursing education to practice is important to identify how challenges faced impact nurses' attitudes and behavioral intentions (Higgins et al., 2010). Taking a different approach to management research within the nursing context, I explore the antecedents and outcomes of organizational efficacy as perceived by new nurses in their work environment.

Organizational efficacy (OE) is component of collective efficacy (Bandura, 1997) that concerns an organization's capacity to cope effectively with the demands and challenges of its business environment (Bohn, 2010). OE is an aggregated measure of individual employee perceptions. It consists of three sub-categories – sense of collective capabilities, sense of mission or purpose, and sense of resilience (Bohn, 2001, 2002, 2010). As defined, OE differs from self-efficacy which is an individual's belief about their personal abilities to perform effectively in each task or job (Bandura, 1977, 1986). OE has not garnered much attention in

management research with a few exceptions (Bohn, 2001; Bohn, 2010; McDowell, 2006), yet it is regarded as being consequential to organizational performance (Gist, 1987). OE is related to organizational performance outcomes and employees' affective organizational commitment (Bandura, 1993; Bakker & Leiter, 2010; Bradford, 2011; Hodges & Carron, 1992; Katz-Navon & Erez, 2005). It is also a useful measure of an organization's future performance and health (Arnetz & Blomkvist, 2007). The handful of research on the topic found relations between OE and leadership ((Bohn, 2002; Borgogni et al., 2009; Caprara et al., 2003; Gully et al., 2002; Gunzel-Jensen et al., 2018), collective performance of groups (Caprara et al., 2003; Chen & Bliese, 2002; Chen & Lee, 2007; Gully et al., 2002; Tasa et al., 2007), and organizational performance (Bradford, 2011; Katz-Navon & Erez, 2005; Bakker & Leiter, 2010).

The purpose of this paper is to explore organizational efficacy as an organizational level construct with individual-level predictors through the context of the nursing work environment. Although there are various important work outcomes in nursing, I focus on the relationships between OE and nurses' job satisfaction and turnover intentions. Job satisfaction has been cited as the most important predictor of turnover among both new and experienced nurses. Therefore, understanding how organizational activity as perceived by individual employees influence this attitude is worthwhile. On the other end, I consider how various workplace demands often included in the job demands-resource model (Demerouti et al., 2001) influence nurses' perception of their organization's efficacy.

### **Study Rationale**

The importance of collective efficacy in similar occupations (for example, teaching) in which individuals are assumed to hold a calling or intrinsic desire for the career. Such desire or calling is predicted to trigger positive work outcomes regardless of the individual experiences and encounters in the work environment (Nseje, 2015). Some studies dispute this assertion

stating the need to properly consider the attitudes and perceptions individuals develop in their workplace in relation to work outcomes. In other words, a simple desire for service to others, which is prevalent in occupations like nursing and teaching, cannot be expected to overshadow the role daily work life encounters in career decision making. Studies have shown that OE can influence the level of efforts and involvement an employee is willing to devote to their organization (Bohn, 2010; Zaccaro et al., 1995) and employee citizenship behaviors (Du et al., 2015). Shamir (1990) also suggested that OE may be a source of motivation for employees which contributes to the improved employee performance. Lastly, van Vuuren et al. (2006) proposed OE as a building block of a healthy work environment. The perception of higher levels of OE may help to reduce deviant behavior and improve employee morale. As the nursing work environment is burdened by ongoing incivility, violence, and aggression incidents that impact both job performance and employees' personal lives (Chang, 2019; ICN, 2009; Johnson, 2009; Taylor & Rew, 2010), improving OE and employee perceptions is an important task for health care organizations. Hence, an examination of the effects of individual job characteristics on employees' OE perceptions can inform HR practices targeted at fostering employee engagement and performance.

### **Literature Review**

The job demands-resource (JD-R model) attributes employee well-being to characteristics of the work environment. The JD-R framework speaks to the relationship between work characteristics and burnout and engagement among employees (Demerouti et al., 2001; Demerouti et al., 2019). The model is underpinned by the assumption of two psychological processes—health impairment and motivational—that predict employee burnout and engagement. The health impairment process explains the link between job demands on negative

work outcomes like exhaustion, burnout, and eventual turnover. The motivational process describes how inherent job resources help to facilitate employee engagement and high job performance (Bakker et al., 2003; Bakker & Demerouti, 2007). In summary, the JD-R model specifies that work demands result in negative outcomes while work resources create positive outcomes for employees. In this study, I focus on the health impairment process and the relationship between job demands and negative work outcomes to understand how nurses develop perceptions of organizational efficacy in their workplaces. Nursing job demands are often categorized into four: physical, quantitative, emotional, and role conflict (Van der Heijden et al., 2019). In this study, I focus on quantitative and emotional demands, and interrole role conflict (i.e., WFC). I examine their direct effects on OE and the indirect effects on important work outcomes in nursing.

### **Work-Family Conflict (WFC)**

WFC is a form of inter-role conflict in individual experience incompatible demands from their work and home domains that hinder effective participation in one or both domains (Greenhaus & Beutell, 1985). It is a bidirectional construct given that the source of conflict can be either from the work domain to the family domain (work-to-family conflict) or vice versa (family-to-work conflict) (Grzywacz & Marks, 2000). However, studies both within and outside of the nursing field have found that WFC has a stronger effect on work outcomes compared to FWC (Grzywacz et al., 2006; Nohe & Sonntag, 2015; Wang & Tsai, 2014). WFC stands out as one of the most key factors influencing the well-being of nurses (Berkman et al., 2015) with significance consequences on the quality of patient care (Varma et al., 2016). Nurses' work environment characteristics include several components that have been linked to reports of higher work-to-family conflict among employees, such as irregular work hours, nontraditional work shifts, high stress and complex work demands, often ambiguous role demands, and

uncertainty about the outcome of work (Schieman et al., 2009; Unruh et al., 2016). Also, nurses have the biggest responsibility for patient lives, which may represent a high psychological strain or demand to them (Le Blanc et al., 2001). Negative work outcomes associated with WFC in nursing include increased turnover intentions (Battistelli et al., 2013; Chen et al., 2015; Yildiz et al., 2021), decline in job satisfaction (Chen et al., 2015; Cortese et al., 2010; Oshio et al., 2017; Yildirim & Aycan, 2008) and life satisfaction (Oshio et al., 2017; Zhang, Rasheed, & Luqman 2020). WFC may also decrease work commitment among nurses (Hatam et al., 2016) and raise issues related to patient safety (Halbesleben et al., 2008) such as medication errors, mental and psychological distress of nurses, emotional exhaustion, and burnout (Burke & Greenglass, 2001; Galletta et al., 2019). Given the historical negative effect of WFC, I also suggest a negative effect on organizational efficacy among nurses and hypothesize the following:

Hypothesis 1: WFC is negatively related to OE.

### **Quantitative Workload**

Quantitative workload has been cited as one of the most significant indicator of job stress among nurses (Moore et al., 2006; Teng et al., 2009). It refers to the amount of work an employee is expected to perform in the workplace (Spector & Jex, 1998). The terms ‘quantitative workload’ and ‘workload’ will be used interchangeably in this paper. Nurses’ workload typically results from staffing shortage which then increase the patient ratios and assignments of retained nurses (Greenglass et al., 2003). Shaffer et al. (2011) have shown that job demands include broad categories of working hours and time pressure, work expectations and role stressors. Nurses typically have a limited amount of time to attend to patients, address non-caring duties of their job (for example, completing patient paperwork), and often must work overtime to complete their daily tasks.

Workload and job stress is higher in nursing compared to other professions (Aiken et al., 2001). High workload and job stress have been associated with increased WFC among nurses, however, it also has direct effects on employee work attitudes and outcomes. Quantitative workload among nurses can contribute to the development of negative work attitudes and perceptions and lead to undesired work outcomes. For example, nurses frequently experience burnout and exhaustion because of their workload (Pisanti et al., 2011). Nurses are also more likely to quit because of the high job demands. Studies have concluded that high workload can be detrimental to patient safety in health care (Aiken et al., 2002; Aiken et al., 2014; Cimiotti et al., 2012; Tubbs-Cooley et al., 2013). Again, relying on previous findings that show that high workload contributes negatively to employee outcomes, I expect a similar effect on organizational efficacy.

Hypothesis 2: Quantitative workload is negatively related to OE.

### **Incivility at Work**

Workplace incivility is described as low intensity, ambiguous, deviant workplace behavior (Andersson & Pearson, 1999; Harold & Holtz, 2015). It is categorized as behavioral incivility (BI), in which a person themselves engages in this ambiguous deviant behavior, experienced incivility (EI), whereby an employee is a recipient of low intense uncivil behavior directed as them. Both forms of incivility have been documented in nursing research with a stronger focus on EI. Nursing incivility includes actions like eye-rolling, sarcasm, insincere attention to others, and disregard of others (Hutton & Gates, 2008; Vagharseyyedin, 2015; Walrath et al., 2010). There are several sources of incivility in the nursing work environment including co-workers, supervisors, physicians, and even patients (Cortina et al., 2001; Jackson et al., 2002; Layne et al., 2019; Magnavita & Heponiemi, 2011; O'Connell et al., 2000). Incivility is also associated with negative nursing outcomes (i.e., poor patient safety and patient mortality)



(McNamara, 2012; Wilson & Phelps, 2013). It also contributes to burnout (Laschinger et al., 2009), turnover intentions and turnover (Laschinger, 2012; Read & Laschinger, 2013). In this study, I examine the relationship between nurses' experienced incivility and their perception of organizational efficacy. I assume that experienced incivility from any source will be negatively related to OE. This expectation assumes that nurses hold their organizations responsible for the continued presence of workplace incivility either through a lack of policies addressing such deviant behavior or the weakness of leadership in enforcing such policies. As supervisors and physicians are also sources of incivility in the nursing work environment, it may reflect a failure in the organization's selection practices as well as other relevant human resource practices aimed at fostering a positive workplace culture. Hence, I suggest the following:

Hypothesis 3a: Incivility from co-workers is negatively related to OE.

Hypothesis 3b: Incivility from supervisors is negatively related to OE.

Hypothesis 3c: Incivility from physicians is negatively related to OE.

Hypothesis 3d: Incivility from patients is negatively related to OE.

### **Work Outcomes**

The extant research on OE has not examined how it influences employee work outcomes. However, there have been findings of a positive relationship between OE and employee commitment, team performance, and organizational performance. A couple studies also emphasize that OE influence employees' willingness to act favorably towards their organization (Bohn, 2010; Zaccaro et al., 1995). Hence, it is likely that OE is also positively related to the work outcomes included in this paper.

### ***Job Satisfaction***

Job satisfaction refers to an employee's positive attitude towards their job. It is one of the most critical factors studied in organizational behavior research. Nurses' job satisfaction has

been researched on multiple fronts as evidenced by recent reviews on the topic (Lu et al., 2012; Lu et al., 2019). Scholars have found a significant effect between job satisfaction and job performance (e.g., Hou et al., 2013), organizational identification (e.g., Van Dick et al., 2004) and organizational commitment (e.g., Knoop, 1995). Conversely, job satisfaction is negatively related to turnover intentions (Lo et al., 2018; Unruh et al., 2016; Van Dick et al., 2004). In the current study, I suggest that highly efficacious organizations will have employees who are extremely satisfied with their work given a clear sense of mission, a positive perception of organizational capabilities, and a sense of organizational resilience (Bohn, 2001). A previous study by Capone and Petrillo (2015) in which they test the Italian adaption of the OE scale developed by Bohn (2001; 2010) found a significant and positive relationship between OE and job satisfaction. This relationship is again tested here:

Hypothesis 4: OE is positively related to job satisfaction.

### ***Turnover Intentions***

Turnover in nursing takes many forms including leaving one's current job or organizational for another (Job turnover or organizational turnover) or leaving the profession entirely (occupational turnover). A review of the extant literature shows that more attention has been focused on organizational turnover with more information now emerging on the predictors and factors influencing occupational turnover among nurses. High turnover rates have so far exacerbated the global shortage of nurses and the ability of the nursing profession to effectively meet societal demands for frontline workers in health care.

Often, studies assess turnover intentions in lieu of actual turnover when employees are still employed in their organization or profession. The research shows that turnover intentions is accurate predictor of actual employee turnover (Mobley et al., 1978). Turnover intentions may

also be directed towards a specific organization or one's current profession (Hayes et al, 2006; 2012; Mazurenko et al., 2015). Hence, it is advisable that both forms be included in studies that highlight the different effects and magnitude of the relationship between various job characteristics and each form of turnover intentions (Mazurenko et al., 2015). The definition of OE (Bohn, 2001; 2002) implies stability, job security, reduce ambiguity in role demands, a sense of collaboration and cohesion among employees. These factors have been known to reduce individual's intentions to quit their organization (Masum et al., 2015) and may also positively influence professional turnover intentions. Therefore, I suggest that OE will be negatively related to both forms of turnover intentions among nurses:

Hypothesis 5a: OE is negatively related to organizational turnover intentions.

Hypothesis 5b: OE is negatively related to professional turnover intentions.

### **Indirect Relationships**

Interrole conflict, quantitative workload, and incivility in nursing, have all been associated with the work outcomes considered in this study – job satisfaction, organizational turnover intentions, and professional turnover intentions (see AlAzzam et al., 2017; Bruck et al., 2002; Cortese et al., 2010; Grzywacz et al., 2006; Lo et al., 2018). Findings conclude that in nursing environments with high WFC, high workload and job stress, and higher levels of experienced incivility, nurses are less satisfied with work and more likely to consider leaving wither the organization or the nursing profession entirely. Hence, in addition to the direct relationships hypothesized, I consider that OE partially mediates the relationships between the job demands included in this paper and the three nursing work outcomes discussed.

Hypothesis 6: OE will partially mediate the relationship between WFC and a) job satisfaction, b) organizational turnover intentions and c) professional turnover intentions.

Hypothesis 7: OE will partially mediate the relationship between quantitative workload and a) job satisfaction, b) organizational turnover intentions and c) professional turnover intentions.

Hypothesis 8a: OE will partially mediate the relationship between co-worker incivility and i) job satisfaction, ii) organizational turnover intentions and iii) professional turnover intentions.

Hypothesis 8b: OE will partially mediate the relationship between supervisor incivility and i) job satisfaction, ii) organizational turnover intentions and iii) professional turnover intentions.

Hypothesis 8c: OE will partially mediate the relationship between physician-related incivility and i) job satisfaction, ii) organizational turnover intentions and iii) professional turnover intentions.

Hypothesis 8d: OE will partially mediate the relationship between patient-related incivility and i) job satisfaction, ii) organizational turnover intentions and iii) professional turnover intentions.

## **Methods**

The model presented here was tested using cross-sectional data collected from a sample of currently employed nurses. A survey questionnaire was distributed to eligible participants using three different methods. First, participants were recruited through an online data panel. The search for additional participants led to recruitment efforts at the University of Texas at Arlington and two regional nursing associations in the U.S. A final sample of 172 participants were included in the model and hypothesis testing.

## Measures

**Work-Family Conflict.** This construct was measured using a multidimensional scale developed by Carlson et al. (2000). It assesses WFC as a second-order construct comprising of time-based, strain-based, and behavior-based dimensions of WFC. In this study, items measuring the behavioral dimension of WFC were not included. The use of the WFC scale in this way is in line with previous studies and the limited investigation of behavior based WFC in the literature (Carlson et al., 2000). The scale asked individuals to respond using a five-point Likert scale (1 = “Strongly disagree” to 5 = “Strongly agree”) and indicate the extent to which work activities impacted participation in their family responsibilities. A sample item of time-based WFC is “The time I must devote to my job keeps me from participating equally in household responsibilities and activities”. Strain-based WFC includes items such as “I am often so emotionally drained when I get home from work that it prevents me from contributing to my family.” Reliabilities were calculated for both the time-based and strain-based subscales, and overall WFC with the following corresponding Cronbach alphas: .89, .93, and .93.

**Workload.** The quantitative workload inventory (QWI) scale developed by Spector (1987) was used in this study. The original inventory included eight items of which three items were dropped in two future revisions of the scale to improve internal consistency. The version of QWI used in this study can be found in the meta-analysis by Spector & Jex, 1998, which examined four self-report measures of job stress and job strain. The scale asked individual to indicate the frequency of different occurrences in their workplace using a five-point scale (1 = “Never” to 5 “Daily”). The overall question posed is “How often do you experience the following in your job?” with individual items assessing distinct aspects of work in nursing. For example, “...Not enough time to provide emotional support to a patient”. The Cronbach alpha for this scale is .86. However, two items: “...Unpredictable staffing and scheduling” and “...Too many

non-nursing tasks required, such as clerical work” were removed during model testing due to poor factor loading in CFA. The reliability of the remaining scale items used in the current analysis is .84.

**Incivility.** Experienced incivility was measured using an adapted scale from Cortina et al. (2001) which investigates workplace incivility in nursing. The original scale included seven-items; however, three items were removed due to time constraints. This left four items assessing workplace incivility and the items were repeated with a different referent (i.e., coworkers, supervisor, physicians, or patients) and participants were asked to respond to each items using a five-point Likert scale ranging from “Strongly disagree” to “Strongly agree.” A sample item is “... Pay(s) little attention to my statement or show little interest in my opinion”. The reliability analysis revealed similar alphas for each referent (i.e., source of incivility) with  $\alpha = .93$ .

**Organizational Efficacy.** A three-item scale was used to assess nurses’ perceptions of their workplace’s organizational efficacy. The three items represent the resilience subscale of the organizational efficacy scale developed by Bohn (2010). All three items were negatively worded and required reverse scoring prior to analysis. Items were rated using a 5-point Likert scale (1 = “*Strongly disagree*” to 5 = “*Strongly agree*”). A sample item is “The organization has no hope of surviving in the future.” Reliability was found to be  $\alpha = .88$  in the current data.

**Job Satisfaction.** Employees’ perceptions of their current job were measured using a modified version of the scale developed by Thompson and Phua (2012). The original scale item is made up of 7-items. However, three items were removed leaving four items to represent employees’ job satisfaction. A sample item is “Most days I am enthusiastic about my job” ( $\alpha = .93$ ).

**Organizational Turnover Intentions.** Participants' intent to leave their organizations was measured using a three-item scale (Landau & Hammer, 1986). Participants provided ratings using a 5-point Likert scale (1 = "*Strongly disagree*" to 5 = "*Strongly agree*"). A sample item is "I am seriously thinking about quitting my job". A reliability analysis was conducted prior to the use of this measure on model and hypothesis testing. In this study, the Cronbach alpha calculated for the scale is .93.

**Professional turnover intentions.** Participants were asked to indicate how often they have considered leaving the nursing profession using a 5-point Likert scale (1= *Never* to 5= *Daily*) using a scale developed by Van der Heijden et al. (2007). Reliability reported for this scale in their study are Time 1 ( $\alpha = .89$ ) and Time 2 ( $\alpha = .85$ ). A sample item is "How often during the course of the past year have you thought of training for a profession other than nursing?" Reliability analysis conducted in this study indicates an alpha of .93 with the cross-sectional data.

**Control variables.** Demographic information on participants of the employees such as age, gender, employment status, tenure in nursing, marital status, presence of children in the home, and work setting, were included as control variables.

## **Results**

I tested the hypothesized model with structural equation modeling (SEM) using plus, version 8.2 (Muthén & Muthén, 2012) with the raw data input file. I used a two-stage procedure (Anderson & Gerbing, 1985), first assessing the measurement model and then hypothesized model shown. For indirect effects, I calculated 95% bootstrapped confidence intervals (CIs) based on 5,000 bootstrapped samples to evaluate significance (Preacher & Hayes, 2008). Indirect effects are significant when their CIs do not include a zero. Means, standard deviations,

correlations, and reliabilities are provided in Table 9. The time and strain-based dimensions of WFC were found to be highly correlated ( $r = .76$ ). Additionally, results of the exploratory factor analysis (EFA) conducted using SPSS 26 indicated 10 factors with both dimensions of work-family combined. However, Carlson et al. (2000) recommend that the individual subscale remain separate. In their scale development, they found better fit when all six factors of the bidirectional WFC were specified compared to the alternative model tested (see Carlson et al., 2000 for elaboration). Hence, I specified a WFC as a second order contrast in the SEM measurement model. The specified model exhibited good fit with the data ( $\chi^2(618) = 1037.01$ , CFI = .93, TLI = .92, RMSEA = .06, BIC = 16,214.67) and items had significant loadings on their respective factors ( $p < .01$ ) with factor loading scores of at least .70. The hypothesized model with a second-order construct for WFC also showed good fit with the data ( $\chi^2(636) = 1085.84$ , CFI = .92, TLI = .92, RMSEA = .06, BIC = 16,170.86). I compared this model to one in which the items for WFC loaded onto a single construct as suggested by EFA. The resulting fit indices indicated that the hypothesized model is a better fit for the data. Table 10 provides fit indices for the measurement, hypothesized, and alternative models.

## **Hypothesis Testing**

### ***Direct Relationships***

Direct relationships between WFC, workload, incivility, and OE were tested by regressing the first stage dependent variable (OE) on each predictor. Hypothesis 1 which suggests that WFC is negatively related to organizational efficacy, is not supported due to non-significant unstandardized estimates. Hypothesis 2 states that quantitative workload will be inversely related to OE whereby high workload will reduce nurses' perceptions of efficacy. This hypothesis is not supported as data analysis did not identify any significant relationship between both variables. Among the various sources of experienced incivility in nursing, only supervisor



incivility had a significant negative effect on OE ( $b = -.35$ ,  $SE = .14$ ,  $p < .01$ ). Therefore, Hypothesis 3b was supported, while Hypotheses 3a, 3c, and 3d are not supported. Going further, OE had significant relationships with job satisfaction ( $b = .46$ ,  $SE = .13$ ,  $p < .01$ ); organizational turnover intentions ( $b = -.57$ ,  $SE = .21$ ,  $p < .01$ ); but not on professional turnover intentions. Hence, Hypotheses 4 and 5b were all supported. Unstandardized estimates of direct paths hypothesized can also be found in Table 11.

### ***Indirect Relationships***

Table 12 provides a summary of unstandardized estimates, standard errors, and CIs for the indirect paths tested here. The first set of indirect relationships proposed in Hypothesis 6 between WFC and job satisfaction, organizational turnover intentions, and professional turnover intentions, were not significant. Hence, Hypothesis 6 is not supported. Hypothesis 7 suggested that OE will partially mediate the relationship between quantitative workload in nursing and the three outcome variables. OE did show some mediation effects in the relationship between quantitative workload and professional turnover intentions (indirect effect =  $.05$ ,  $SE = .04$ , 95% CIs [ $.002$ ,  $.17$ ]). However, there was no significant relationship between workload and OE which is the first step in the test for mediation (Baron & Kenny, 1986). Hence, the findings do not provide support for hypothesis 7. Among the specified indirect relationships in Hypotheses 8a, 8b, 8c, and 8d, only the indirect relationship between supervisor incivility and the three outcome variables (Hypothesis 8b) were supported. OE mediated the relationship between supervisor incivility and nurses' job satisfaction (indirect effect =  $-.19$ ,  $SE = .07$ , 95% CIs [ $-.34$ ,  $-.05$ ]), their organizational turnover intentions (indirect effect =  $.31$ ,  $SE = .12$ , 95% CIs [ $.06$ ,  $.54$ ]), and professional turnover intentions (indirect effect =  $.09$ ,  $SE = .06$ , 95% CIs [ $.02$ ,  $.26$ ]).

Among the control variables, employment status ( $b = -.18, SE = .09, p < .10$ ), tenure in nursing ( $b = .14, SE = .08, p < .10$ ), and having children at home ( $b = -.50, SE = .12, p < .01$ ) were related to job satisfaction. Age ( $b = -.01, SE = .006, p < .05$ ) and having children in the home ( $b = .36, SE = .18, p < .05$ ) were significant predictors of organizational turnover intentions. Age ( $b = -.01, SE = .004, p < .10$ ) and the presence of children in the home ( $b = .27, SE = .13, p < .05$ ) were also related to nurses' intentions to leave the profession. Figure 5 provides a diagram of the hypothesized model with unstandardized estimates of direct paths.

## Discussion

The purpose of this paper was to conduct an exploratory study of the individual-level predictors and outcomes of organizational efficacy in the nursing work environment. OE has been linked to several positive work outcomes including employee well-being, sense of belonging, and job-satisfaction (Capone & Petrillo, 2015). Hence, it is a beneficial management concept that requires more attention than currently exist in management research and practice (Bohn, 2001; Gist, 1987). I investigated the relationships between three job demands – WFC, quantitative workload, and workplace incivility – and organizational efficacy as well as the effect of OE on nurses' job satisfaction and turnover intentions. From the findings, nurses' workload and experienced incivility from supervisors strongly influenced how they perceive their work environment and the organization's capabilities. Supervisor incivility strongly influenced OE perceptions among nurses. In turn, OE was a significant mediator of the relationships between supervisor incivility and three nursing work outcomes – job satisfaction, organizational turnover intentions, and occupational turnover intentions.

Employees often perceive their managers and supervisors are often perceived as proxies for the organization, a term known as supervisor organizational embodiment (SOE);

Eisenberger et al., 2010). SOE is higher when subordinates observe a strong alignment of the supervisor's values and beliefs with that of the organization. Since, nurse managers (or supervisors) are typically in charge of scheduling staff and assignment patient loads, employees may attribute staffing shortage to their supervisory ineptness and indirectly, evaluate the organizational to be incapable and inefficient. Furthermore, when employees perceived high SOE, they are more likely to perceived view their supervisor's incivility (or other forms of abusive supervision) as being sanctioned by the organization itself and contribute a negative perceived of OE. Therefore, training programs should be provided for managers and supervisors to help them develop proper leadership skills and behavior. Additionally, health care organizations should issue and enforce statements denouncing employee bullying and abusive supervision as these experiences to curb their detrimental effects.

On the other end of the model, OE was a significant predictor of job satisfaction, organizational turnover intentions and to a lesser extent, nurses' intention to quit the profession. Prior research has echoed the need for a sustained organizational response to job demands (Bakker & Demerouti, 2007; Xanthopoulou et al., 2007) which can help promote perceived OE among employees (Fearon et al., 2013). Among organizational factors states to promote OE, leadership styles and behavior have been found to hold significant impact on perceived OE (Bohn, 2002; Gunzel et al., 2018). These prior conclusions further support the finding here that supervisor incivility reduces perceived OE among employees. Among the various leadership styles discussed in the literature, transformational and servant leadership have received attention as correlates of OE (Gunzel-Jensen et al., 2018; Nastiezaie et al., 2016). Therefore, these are important behaviors for organizations to instill and cultivate in their management and leadership teams.

These findings may hold useful human resource (HR) implications for organizations in health care and other industries. Therefore, research undertaking is needed to develop literature beyond its current state. In the extant research on OE, certain organizational behavior (OB) constructs have been examined. For example, van Vuuren et al. (2008) found that OE predicts the three dimensions of organizational commitment (OC), with the strongest relationship existing between OE and the affective component of OC. However, there is opportunity to address core HR-concepts in the research on perceived OE. Particularly within the nursing context, HR-related problems of turnover and retention are the most prevalent with impact on employee performance and patient safety. Therefore, relating OE to emerging HR practices, studies may consider how OE helps to support employee referral programs in organizations. Employee referral programs are highlighted here as they might be an effective solution to poor nurse staffing in health care organizations. They have been shown to be cost-effective with the potential to acquire candidates who remain in the organization longer (Mani, 2012; Pieper, 2015; Pieper et al., 2018; Saks & Ashforth, 2000). Recently, Stockman et al. (2020) investigated the referral bonuses and an autonomous referral process on nurses' willingness to recommend high quality candidates to their current organizations. They found that the availability of autonomy in the referral process increased nurses' willingness to refer others, but the bonus amount had no useful effects (Stockman et al., 2020).

It is likely that employees in efficacious organizations will be more willing to refer others to the company since they expect the organization to remain in existence for a longer period regardless of any adversity it encounters. Other topics for future research include examining the effects of OE in developing sustained competitive advantage through the recruitment and retention of outstanding employees. Studies may also consider how OE fosters knowledge

sharing and innovation among employees. Studies should also identify additional individual and group level predictors of organizational efficacy in the workplace. This will enable organizations to structure HR programs and practices in a positive manner that enhances employees' beliefs about their organization. Although the current study did not find any significant relationship between other forms of job demands and OE, there is a need to reinvestigate the model using more complex models and data analysis.

### **Limitations**

The use of an already existing dataset limited the study in several ways. First, the measure of organizational efficiency utilized here was limited to the “sense of resilience” dimension, practically excluding two other aspects of OE suggested by Bohn (2001). Second, the dataset did not include measures of more relevant HR constructs which is an area in which OE may be more consequential. Lastly, the dataset contained a small size and was cross-sectional in nature. Although the original data collection included a longitudinal study, the small number of responses restricted the opportunity to conduct time-lagged data analysis. Hence, future research involving a larger data collection effort with measures collected at different time points is necessary to confirm the directions and significance of the relationships found in this study. Qualitative methods such as the grounded theory methodology (Glaser & Strauss, 1965) should also be incorporated in future studies to better understand nurses' interpretation of OE and the ways in which individual job demands and resources contribute to their perceptions.

### **Conclusion**

Although scholars have alluded to the importance of OE over the past several years (Bandura, 1977; Bohn, 2001; 2010; Gist, 1987; Zaccaro et al., 1990), the research on it is still limited. The current study was conducted to explore individual-level predictors and outcomes of

OE for workers in the nursing profession. Findings revealed that supervisor behavior strongly influence perceived OE.

## **Chapter 5: Overall Discussion of Dissertation Research**

Over the past year, nurses have faced tremendous challenges which are document here and in other studies cited in the current research. As frontline employees, they worked long hours to attend to patients' needs and found it impossible to manage time (Fernández-Castillo et al., 2021). Even as vaccinations have been introduced and there has been a decline in new infections, there are still lingering effects within health care organizations. In essence, the pandemic is not over, and nurses remain in high demands to render life-saving care.

While these events underscore the timeliness of current research, the motivation to understand the motivations and work experiences of nurses existed prior to the onset of COVID-19. However, the pandemic did create challenges with data collection as increase work demands for nurses and nationwide guidelines on in-person interactions restrained access to the target sample. A significant part of my research was also conducted between June and September 2020 a period at which many U.S. states were going through the peak of the pandemic and frontline workers were overwhelmed with patient care responsibilities. Other factors may have also contributed to the overall sample size used in the research. For example, the lack of a readily available database of nurses, like that utilized in the European NEXT study (Van der Heijden et al., 2007), makes it almost important to generate a larger data sample or conduct rigorous longitudinal research.

Regardless, there are opportunities to strengthen the rigor and relevance of the research. A research modification would be the use of secondary data available through trusted public data sources like the Inter-public Consortium for Social Science research (ICSPR). Secondary data is beneficial as it is less time-consuming and inexpensive to acquire and utilize. However, there are concerns with data quality and the inability for the researcher to control the questions/scales

included in the survey as they have already been collected. Another modification to Essay 1 would be the inclusion of the interview data collected on the experiences of nursing students during the COVID-19 pandemic. This allows for a comparison between individuals at various stages of their nursing careers. Additionally, the empirical model hypothesized in Essay 1 and used in Study 2, can be modified to include measures of perceived COVID-19 threat by nurses and a quantitative evaluation of their preparedness and crisis self-efficacy (Park, 2016; Park & Avery, 2019).

Moving beyond the challenges of conducting this research, some noteworthy results were found. First, I found that initial career choice motives developed prior to an individual's formal interaction with their chosen profession may have lingering effects and influence future work outcomes. Particularly, career choice motives are a significant predictor of professional commitment at a later stage in the one's career. However, the use of cross-sectional data limits the conclusiveness of this finding. If confirmed by future longitudinal studies, this is an important implication for organizations. Specifically, organizations whose core employees engage in high-risk occupations. This study suggests that organizations in such industries or field focus on selecting individuals with altruistic or prosocial motives. Furthermore, HR practices that build on those motivations during and after organizational socialization should be developed.

Organizations should also assist their new employees in improving their abilities to cope with difficult tasks and situations on the job. One way to do is to equip managers and supervisors with the appropriate leadership skills that encourage employee development and participation in the workplace. Some example of leadership styles that can foster OCSE include transformational leadership, authentic leadership (Fallatah et al., 2017; Laschinger et al., 2015; Luthans & Avolio,



2003), servant leadership (Dierendonck, 2010) and ethical leadership (Brown & Treviño, 2006). Also, social support from preceptors is important for newly graduate nurses as well as opportunities for autonomous job performance.

Furthermore, the importance of organizational efficacy in employee work outcomes was highlighted in this research. The original purpose of studying OE was to understand if and how it influenced turnover intentions during the COVID-19 pandemic. During the pandemic, new reports surfaced regarding high turnover among nurses either as a result of job stress or the capabilities of health care organizations. In truth, the pandemic revealed several flaws present in the health care industry (Morin, 2020; Rosa et al., 2020) such as the inadequate provision of PPE to employees, uneven distribution of compensation to augment the risks nurses were being exposed to. In the first study, I hypothesized that OE would moderate between career choice motives and turnover intentions of new nurses. This hypothesis is not supported. However, I identified a relationship between OE and organizational turnover intentions, which was also confirmed in Essay 3. Even further, the relationship between OE and professional turnover intentions which was found in Essay 1 but was not significant was replicated in Essay 3 with at a reasonable level of significance.

The final study found that supervisor incivility in the workplace can impact how employees (in this case, nurses) perceive their organization. Supervisors often serve as an embodiment of the overall organization (Eisenberger et al., 2010) which explains why this relationship is stronger compared to the other variables studied. OE was also positively related to job satisfaction and mediated the relationships between supervisor incivility, job satisfaction, and both organizational and professional turnover intentions. However, the scarcity of research on

OE signal opportunities for future research to better understand the construct and its place within organizational behavior and management research and practice.

This dissertation serves as an exploration and pilot study of aspects of the nursing environment that exhibit significance to the research on the global shortage of nurses. The role of initial career choice motives in early career outcomes was examined. Also, impact of employee job demands on OE and its effect on employee outcomes was studied. The current research frames nursing as more than a helping profession, rather, as a high-risk helping profession in which the altruistic benefits of being a nurse are accounted for alongside the harsh realities of the profession such as violence, incivility, and ethical dilemmas. High-risk professions have not received much attention and most of the research is focused on occupations which are male-dominated unlike the nursing profession. Hence, exploring nursing in this frame can also shed light on the gender-specific experiences of individuals in such occupations. Another female-dominated high-risk profession is noted in the aviation industry (i.e., flight attendants). Ironically, these occupations are also characterized by low compensation which may reflect intersectionality in gender and work status of individuals in the society. The current research lays foundation for future research to improve upon and inform more effective human resource practices and policies.

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**Table 1***Participants Personal and Work Demographics (N=4)*

<b>Participant Race/Ethnicity</b>	<b>Gender</b>	<b>Age</b>	<b>Hospital size</b>	<b>Work Experience (at time of interview)</b>
Nurse 1 (White)	Female	28	Medium (200-400 beds)	6 months
Nurse 2 (Black)	Female	35	Medium (200-400 beds)	1.5 years
Nurse 3 (Asian)	Female	26	Large (1000 beds)	1 year
Nurse 4 (Black)	Female	26	Medium (200-400 beds)	About 2 years
Nurse 5 (Black)	Male	32	Medium-Large	6 months
<i>Note.</i> Hospital size/classification reported by individual participants.				

**Table 2**

*Themes and Sub-themes Derived from Qualitative Analysis of Interviews*

Themes	Emergent codes	Sub-themes	Theme examples (Quotes)
Theme 1: Nurses' choice motivations and expectations	Altruism/Service		"I worked in government contracting...I didn't really feel like I was helping anyone. Like I wasn't really benefitting society."
			"I thought about other things that I had to put into consideration, like my family and all that. And, like the availability of jobs and everything. So, I decided to go into nursing."
	Practical reasons		"I realized [that] in health care settings, I saw the nurse's face. You know, I interacted with the nurses the most. So, I respected that profession a lot more in health care settings. So that's why I decided to pursue being a nurse."
			"...always being around the family that cater to other people's needs, even though it wasn't in the medical sense, more so on the physical and spiritual, that kind of just led to my desire to help others as well."
	Calling		
Theme 2: Working during COVID	Recognition	Heard but not supported	"I felt heard, but I don't necessarily feel completely supported. But I think it was above their level. I mean, like running out of PPE was frustrating, like running out of masks. And with the like just changing guidelines...[I] feel [un]safe in my own job I felt heard, but I do not necessarily feel completely supported. But I think it was above their level. I mean, like running out of PPE was frustrating, like running out of masks. And

		with the like just changing guidelines...[I] feel [un]safe in my own job..."
	Two sides of being essential (obvious)	"I mean, I wasn't surprised. I mean, even before COVID it was like we worked holidays. We worked nights. You know, the hospital does not close. It is always open... So, pandemic or not, I think I have always considered myself, an essential worker "
	Two sides of being essential (no choice)	" I remember the first day our charge nurse pulled us into a huddle, and he said, okay, guys, you know, you can't choose not to take care of a patient. You are a nurse. You signed up to take care of everybody. You know, obviously, people some people were not happy. People were crying because, you know, COVID is real...everybody is scared."
		"I think before the pandemic...how hard we worked at the hospital, no matter what, was not as recognized... It felt nice to be recognized, even though we were doing pretty much the same thing... I felt like we were put on pedestals, you know.... And it felt nice."
	Contrasting treatments	"But then coming to the organization that I work for, I mean, they claim that, you know, all of you are our heroes, you're this or that. But I then you know, I feel like we could have been more appreciated than the way they did, not just in writing, but like monetary payments and or...I do not know, some award maybe that might...I was expecting more from my place of work, so I don't know."

		A different workplace.	"I feel like I had a lot of passion for my job before and I was really excited to be into cardiac ICU. But we did not have that population anymore, instead it was all COVID, instead it was all respiratory. You know, and we did not get our typical patient population. So, I think I got really exhausted and just stressful all the time. And yeah, there was a couple moments where I was like. Why am I doing this?"
Theme 3: Organizational Efficacy and Worker's Intentions			"I have learned I think in my experience that hospitals are businesses and it's really important to say so. I feel like they are so concerned about profit. They're so concerned about what we can do to save money...there are times when it just feels like they see us more as a number sometimes over a person."
			"I believed that they responded well by, you know, quickly making changes to.... You know, to things that are already set on ground. They quickly rose up to respond to the threats, even though it was not you know, it was not real at the time. It was just, you know, a threat. And, you know, they fore...they forecasted that the numbers would go up. So, they already prepared so that in case the surge comes, at any time we are prepared, we are ready. We have the manpower."

**Table 3***Means, standard Deviation, correlations, and reliabilities of variables.*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Age	42	14.34	—							
2. Gender	.16	.37	.04	—						
3. Employment Status	.76	.43	-.42**	.08	—					
4. Setting	2.18	1.86	.22*	-.03	-.07	—				
5. Career choice motives (Dummy)	.69	.47	-.13	-.12	-.01	-.16	—			
6. Organizational Efficacy	4.41	.93	.10	-.18	-.03	.05	.04	(.83)		
7. Organizational Turnover Intentions	2.18	1.34	-.22*	.10	.07	-.13	-.06	-.53**	(.93)	
8. Professional Turnover Intentions	1.6	1.04	-.10	.07	-.04	.03	-.01	-.34**	.48**	(.94)

*Note. N = 115*\*\**p* < .01.\**p* < .05.

**Table 4***Regression results for organizational turnover intentions.*

Variable	Step 1			Step 2			Step 3		
	Dependent Variable			Dependent Variable			Dependent Variable		
	Organizational Turnover Intentions			Organizational Turnover Intentions			Organizational Turnover Intentions		
	b	SE	t	b	SE	t	b	SE	t
Age	-.02*	.01	-2.159	-.02*	.01	-2.23	-.02 <sup>†</sup>	.01	-1.852
Gender	.38	.02	1.111	.34	.34	.991	.02	.30	.053
Employment Status	-.13	.03	-.402	-.14	.32	-.429	-.11	.27	-.386
Work Setting	-.05	.04	-.795	-.06	.07	-.914	-.04	.06	-.70
Career Choice Motives (CCM)				-.25	.27	-.919	1.25	1.07	1.17
Organizational Efficacy							-.54**	.18	-2.99
CCM × Organizational Efficacy							-.34	.24	-1.38
R <sup>2</sup>		.07			.07			.33**	

Note.  $N = 115$ <sup>†</sup> $p < .10$ .\* $p < .05$ .\*\* $p < .01$ .



**Table 5***Regression results for professional turnover intentions.*

Variable	Step 1 Dependent Variable Professional Turnover Intentions			Step 2 Dependent Variable Professional Turnover Intentions			Step 3 Dependent Variable Professional Turnover Intentions		
	b	SE	t	b	SE	t	b	SE	t
Age	-.01	.01	-1.536	-.01	.01	-1.533	-.01	.01	-1.181
Gender	.26	.27	-.949	.25	.27	-.924	.09	.26	.328
Employment Status	-.26	.25	-1.02	-.27	.25	-1.020	-.24	.24	-.992
Work Setting	.03	.05	.596	.03	.06	.572	.04	.05	.788
Career Choice Motives (CCM)				-.03	.22	-0.116	.65	.94	.686
Organizational Efficacy							-.29	.16	-1.78
CCM × Organizational Efficacy							-.15	.214	-.698
R <sup>2</sup>		.03			.03			.14	

Note. *N* = 115†*p* < .10.\**p* < .05.\*\**p* < .01.

**Table 6***Means, standard Deviation, correlations, and reliabilities of variables.*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. Age	42	14.34	–								
2. Gender	.16	.37	.04	–							
3. Setting	2.18	1.86	.22*	-.03	–						
4. Employment Status	.76	.43	-.42**	.08	-.07	–					
5. Career choice motives (Dummy)	.69	.47	-.13	-.12	-.16	.01	–				
6. Professional Commitment	4.28	.84	-.19*	-.06	-.01	-.06	.25**	(.91)			
7. Occupational Coping Self-Efficacy (Relational Burden)	3.34	.80	.13	-.08	.17	-.15	-.04	.22*	(.82)		
8. Organizational Turnover Intentions	2.18	1.34	-.22*	.10	.07	.07	-.06	-.36**	-.17	(.93)	
9. Professional Turnover Intentions	1.6	1.04	-.10	.07	-.04	-.03	-.01	-.57**	-.21*	.48**	(.94)

*Note. N = 115*\*\**p* < .01.\**p* < .05.

**Table 7***Mediated path analysis predicting Professional Commitment, OCSE, and Turnover Intentions*

Variable	<i>First Stage</i> <i>Dependent Variable</i> <i>Professional</i> <i>Commitment</i>			<i>First Stage</i> <i>Dependent Variable</i> <i>OCSE</i>			<i>Second Stage</i> <i>Dependent Variable</i> <i>Organizational Turnover</i> <i>Intentions</i>			<i>Second Stage</i> <i>Dependent Variable</i> <i>Professional Turnover</i> <i>Intentions</i>		
	b	SE	t	b	SE	t	b	SE	t	b	SE	t
Career Choice Motives (CCM)	.47**	.18	2.62	-0.08	0.16	-0.47						
Professional Commitment							-.50**	.18	-2.79	-.72**	.14	-5.03
Occupational Coping Self-Efficacy	.24*	.11	2.16				-.11	.17	-0.65	-.12	.13	-0.91
R <sup>2</sup>		.12			.002			.14			.36	
ΔR <sup>2</sup>					.10			.12*			.24**	

Note. *N* = 115\**p* < .05.\*\**p* < .01.

**Table 8***Indirect effects of professional commitment and occupational coping self-efficacy on outcome variables*

Path	Indirect effect	95% CIs
CCM→ PC →Organizational Turnover Intent	-.23	[-.55, -.05]
CCM→ PC →Professional Turnover Intent	-.34	[-.65, -.11]
CCM→ OCSE-RB →Organizational Turnover Intent	.01	[-.03, .13]
CCM→ OCSE-RB →Professional Turnover Intent	.01	[-.02, .13]
CCM→ OCSE-RB→ PC →Organizational Turnover Intent	-.01	[-.03, .07]
CCM→ OCSE→ PC →Professional Turnover Intent	-.01	[-.04, .09]

Note. N = 115. Confidence intervals of unstandardized model results based on estimates of 95% confidence interval. CCM = career choice motives; PC = professional commitment; OCSE-RB = occupational coping self-efficacy (relational burden); ULCI = upper-level bound of confidence interval; LLCI = lower-level bound of confidence interval

**Table 9***Means, standard Deviation, correlations, and reliabilities of variables.*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Age	41	13.12	–																	
2. Gender	1.88	0.34	-.01	–																
3. Employment Status	0.79	0.41	-.32**	-.06	–															
4. Nurse Tenure	4.25	0.69	.08	.08	-.01	–														
5. Marital Status	2.07	1.65	-.21**	.02	.15	-.07	–													
6. Children	0.53	0.50	.03	.04	.12	.19*	-.35**	–												
7. Setting	2.08	1.85	.15*	-.00	-.02	.03	-.09	.19*	–											
8. WFC Time	3.11	1.25	-.02	.01	.01	.092	-.09	.15	-.10	(.89)										
9. WFC Strain	3.08	1.30	.00	.06	.05	.082	-.10	.13	-.03	.76**	(.93)									
10. Quantitative Workload	2.80	1.12	.10	.00	-.03	.15	0.00	.02	-.05	.49**	.56**	(.84)								
11. Coworker Incivility	1.66	0.96	-.01	.00	-0.06	-.06	.11	-.03	.06	.22**	.20**	.19*	(.93)							
12. Supervisor Incivility	1.67	0.98	.00	-0.10	.02	.01	.11	.03	-.05	.35**	.33**	.31**	.51**	(.93)						
13. Physician Incivility	1.78	0.97	-.18*	-0.02	0.05	-.06	0.03	-.03	-.10	.33**	.30**	.31**	.55**	.50**	(.93)					
14. Patient Incivility	1.93	1.06	-.13	.01	.06	0.02	.03	-.01	-.06	.29**	.35**	.36**	.38**	.45**	.56**	(.93)				
15. Organizational Efficacy	4.45	0.96	.09	.11	-.08	.07	-.12	.05	-.01	-.19*	-.20**	-.33**	-.34**	-.45**	-.32**	-.28**	(.88)			
16. Job Satisfaction	4.05	0.89	.03	0.04	-.16*	.07	-.07	-.21**	-.13	-.26**	-.28**	-.31**	-.28**	-.32**	-.21**	-.24**	.47**	(.93)		
17. Organizational Turnover Intentions	2.11	1.31	-.20**	-0.09	.90	.01	.13	.05	0.00	.32**	.34**	.34**	.38**	.50**	.42**	.38**	-.52**	-.49**	(.93)	
18. Professional Turnover Intentions	1.5	0.94	-0.08	-0.02	-.07	-.10	.06	.07	-.01	.26**	.21**	.28**	.28**	.35**	.31**	.25**	-.22**	-.51**	.38**	(.93)

**Table 10***SEM model testing results*

Model	$\chi^2$	<i>df</i>	CFI	TLI	RMSEA	BIC
Measurement Model	1037.01	618	0.93	0.92	0.06	16214.67
Hypothesized Model	1085.84	636	0.92	0.92	0.06	16170.86
Alternative model 1 (WFC specified as a unidimensional construct)	1184.76	638	0.91	0.9	0.07	16259.48

Note: N =172.

**Table 11***Mediated path analysis predicting organizational efficacy, job satisfaction, and turnover intentions.*

Variable	<i>First Stage Dependent Variable Organizational Efficacy</i>			<i>Second stage Dependent Variable Job Satisfaction</i>			<i>Second Stage Dependent Variable Organizational Turnover Intentions</i>			<i>Second Stage Dependent Variable Professional Turnover Intentions</i>		
	b	SE	t	b	SE	t	b	SE	t	b	SE	t
Work-family conflict	.01	.11	0.0									
Quantitative workload	-.17	.11	-1.57									
Coworker Incivility	-.10	.15	-.66									
Supervisor incivility	-.35**	.13	-2.73									
Physician incivility	.01	.15	0.09									
Patient incivility	-.06	.10	-0.55									
Organizational efficacy				.56**	.13	4.17	-.94**	.22	-4.21	-.28*	.14	-1.982
R <sup>2</sup>		.36			.33			.40			.08	
ΔR <sup>2</sup>					.03**			.07**			.32	

Note. *N* = 172\**p* < .05.\*\**p* < .01.

**Table 12***Mediated unstandardized indirect effects for job satisfaction, organizational turnover intentions, and professional turnover intentions.*

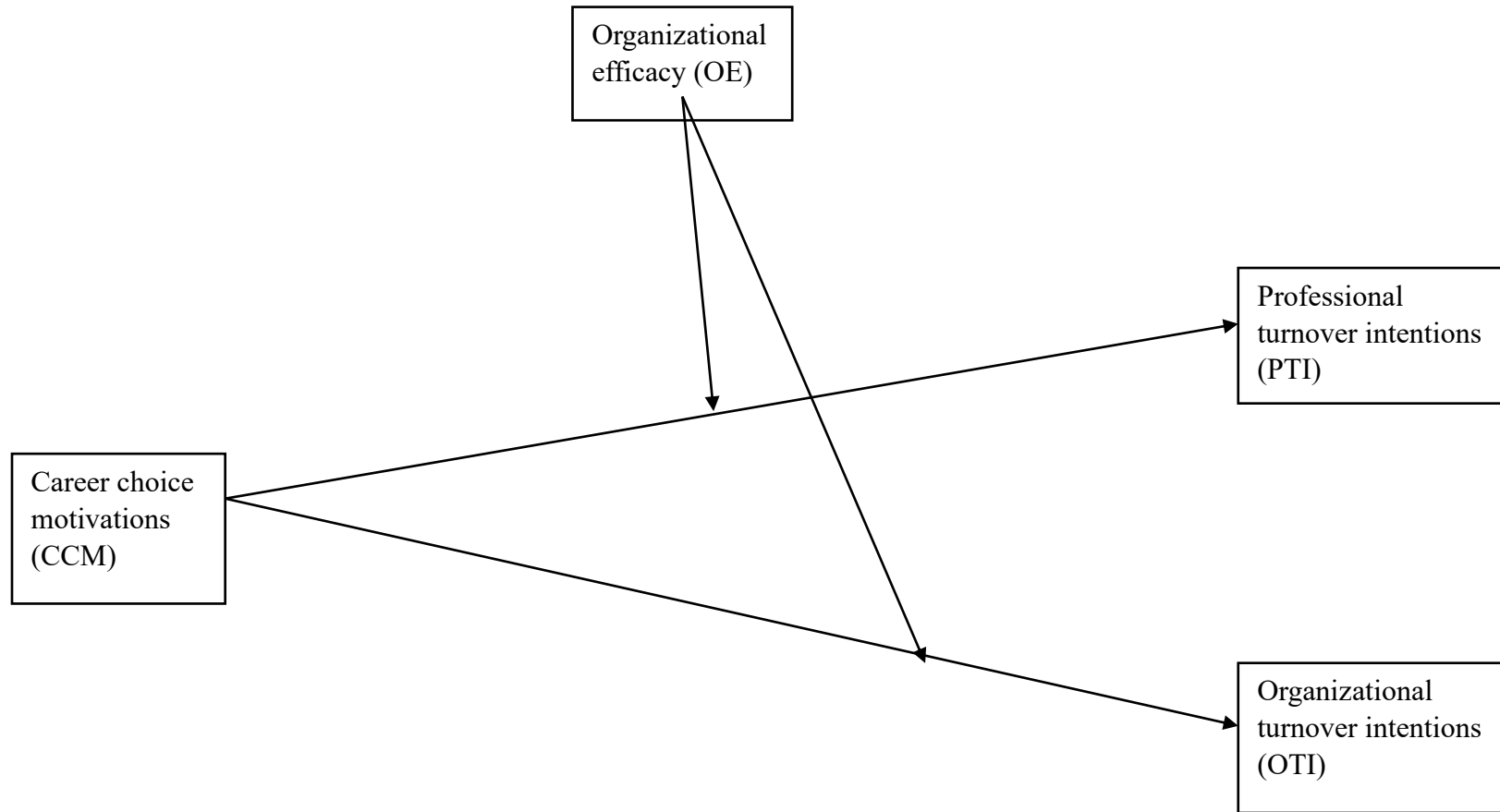
Path	Indirect Effect	SE	LLCI	ULCI
<b>Job Satisfaction</b>				
WFC→ OE →JS	.003	.06	-0.13	0.12
Workload→ OE →JS	-.09	.06	-0.25	0.01
Coworker Incivility → OE →JS	-.06	.09	-0.25	0.10
Supervisor Incivility → OE →JS	-.20	.07	-0.35	-0.06
Physician Incivility → OE →JS	-.01	.08	-0.14	0.19
Patient Incivility → OE →JS	-.03	.06	-0.15	0.07
<b>Organizational Turnover Intentions</b>				
WFC→ OE →OTI	-.005	.10	-0.18	0.22
Workload→ OE →OTI	.16	.10	-0.02	0.38
Coworker Incivility → OE →OTI	.09	.15	-0.20	0.37
Supervisor Incivility → OE →OTI	.33	.12	0.09	0.56
Physician Incivility → OE →OTI	-.01	.14	-0.29	0.26
Patient Incivility → OE →OTI	.05	.10	-0.12	0.26
<b>Professional Turnover Intentions</b>				
WFC→ OE →PTI	-.001	.03	-0.07	0.07
Workload→ OE →PTI	.05	.04	0.00	0.16
Coworker Incivility → OE →PTI	.03	.05	-0.05	0.15
Supervisor Incivility → OE →PTI	.10	.06	0.02	0.26
Physician Incivility → OE →PTI	-.003	.04	-0.10	0.08
Patient Incivility → OE →PTI	.02	.03	-0.03	0.10

Note. N = 172. Confidence intervals of unstandardized model results based on estimates of 95% confidence interval. JS = job satisfaction; ULCI = upper-level bound of confidence interval; LLCI = lower-level bound of confidence interval.



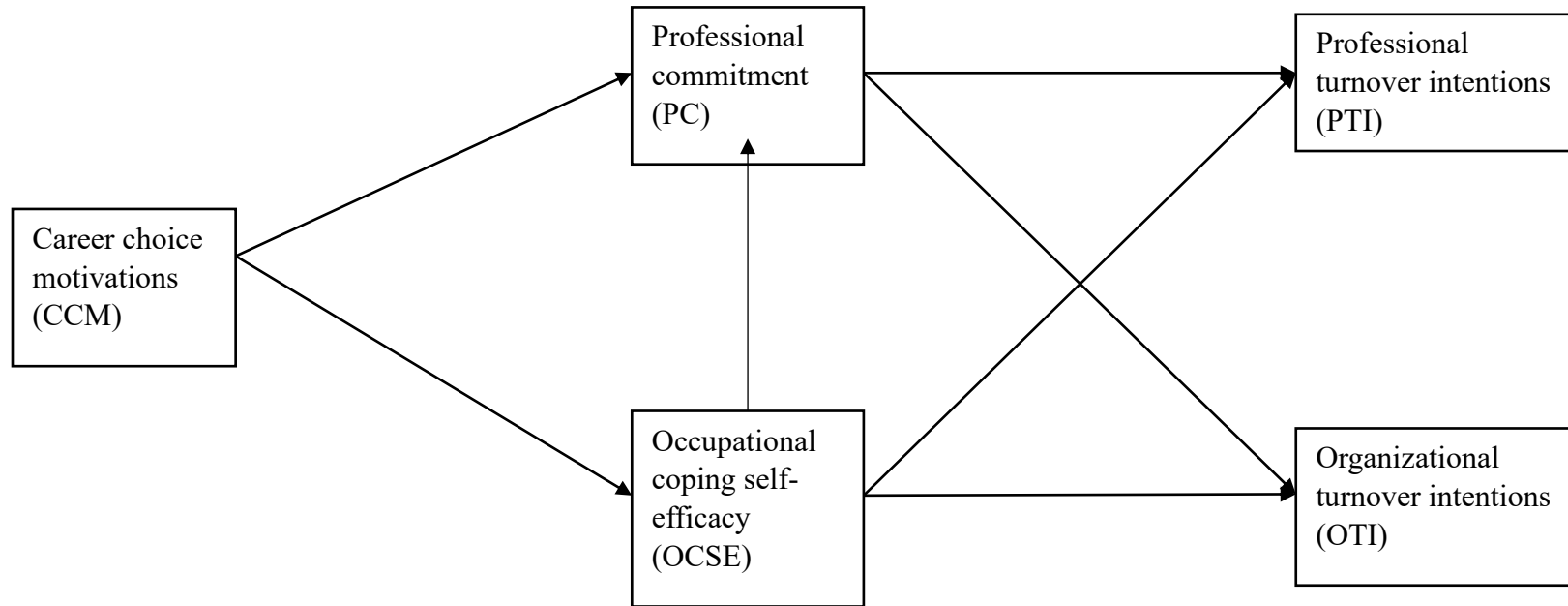
**Figure 1.**

*Hypothesized model of career choice motives and turnover intentions.*



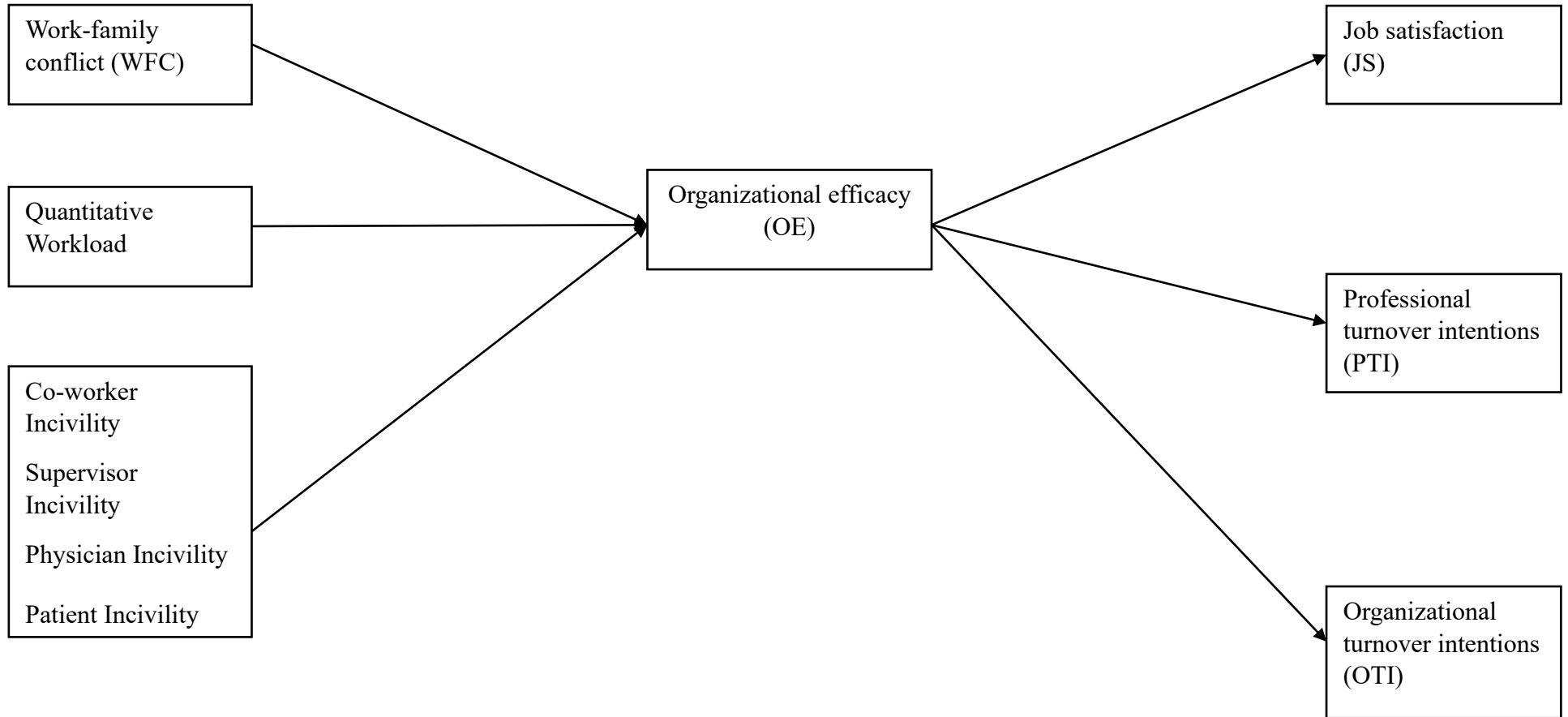
**Figure 2.**

*Hypothesized model of mediating effects of professional commitment and occupation coping self-efficacy.*



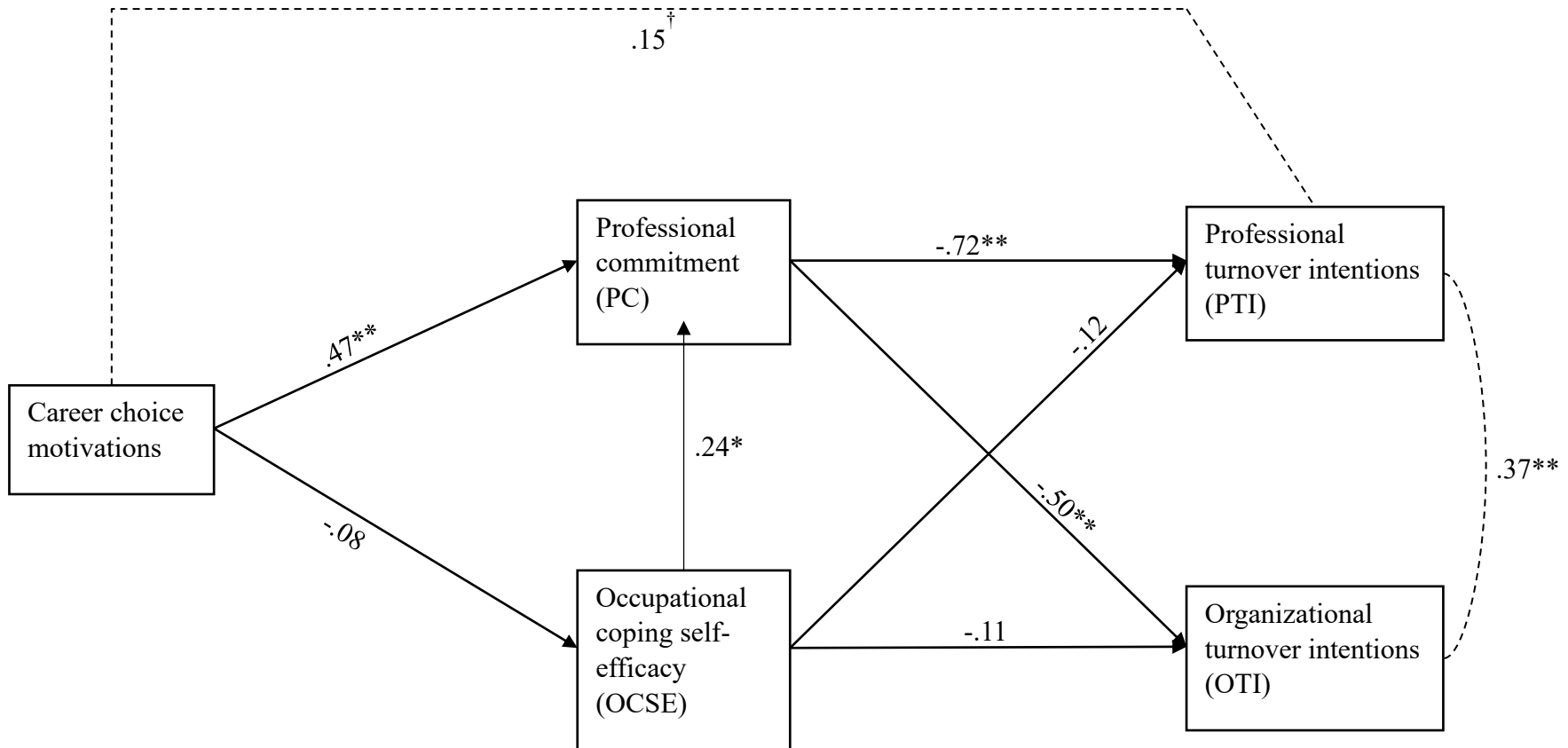
**Figure 3.**

*Hypothesized model of individual- (employee) level predictors and outcomes of organizational efficacy.*



**Figure 4.**

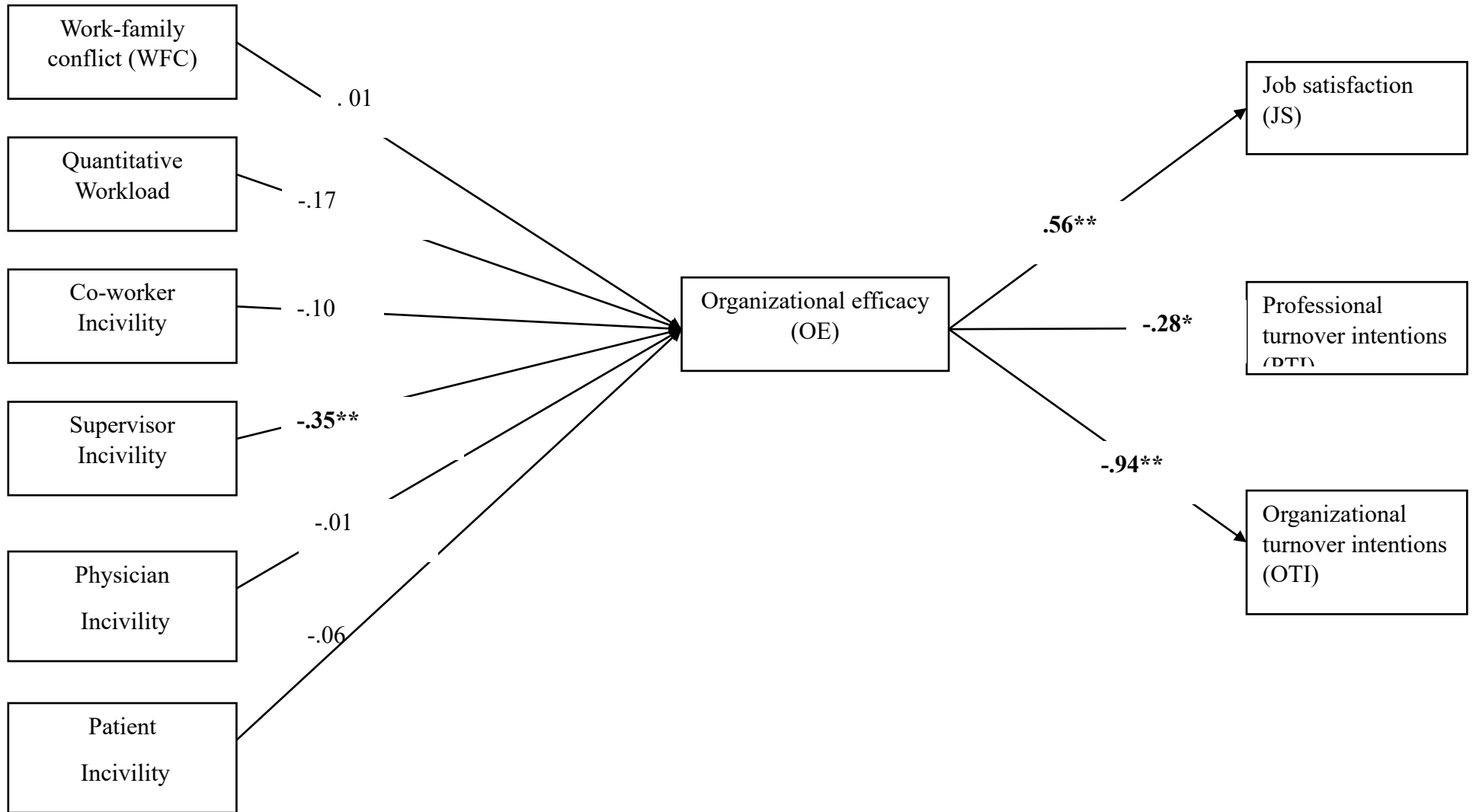
*Path analysis diagram of professional mechanisms mediating career choice and turnover intentions.*



Unstandardized coefficients are reported. Control variables are not displayed.  
 $\dagger p < .10$ .  $* p < .05$ .  $** p < .01$ .

**Figure 5.**

*Structural equation modeling results for the hypothesized model*



## Appendix A – Qualitative Study Materials

### Interview Questions for Current Nursing (healthcare) Professionals

Date of Interview:

Interviewee Number:

#### Section A – Informed consent

- At the beginning of each interview, an abridged version of the consent form was read to participants, and I recorded their verbal consent.  
*Please indicate whether you consent to participate in this interview.*

#### Section B – Demographics

1. What gender do you identify with?
2. What is your race?
3. Are you Hispanic or Latino? (Skip if answered in question 2)
4. How old are you?
5. What type of healthcare organization are you employed with (hospital, clinic, emergency care, etc.)?
  - a. Which other healthcare settings (organizations) have you worked in?
6. What department do work for in your current job (emergency department (ED), trauma care, intensive care unit (ICU), etc.)?
  - a. Which other department(s) have you worked in? (Either in your current organization or a previous one)
7. What is your company size (i.e., how many employees does your organization have)?

#### Section C – Research Study/Main Interview

##### Career choice Questions

1. When did you decide to pursue healthcare (in your case, nursing) as a profession?
  - a. What motivated your decision to do so?
  - b. In what ways has nursing met your expectations
  - c. In what ways has nursing not met your expectations?
  - d. Would you recommend nursing as a career path/profession to others? (Why or why not?)
2. Prior to your decision to pursue healthcare, did you have family members working in a similar profession? (Skip question if family member already mentioned in question 1)

- e. If yes, to what extent did their choice of profession influence your decision to pursue this profession?
- 3. Were you exposed to the profession in any way prior to entering college?
  - f. Did this exposure influence your career choice in any way?
- 4. Did your motivation and/or rationale to pursue this career change during college?
  - g. Has it changed since you have been working? If yes, explain.

### Questions on COVID-19

Thinking about the recent healthcare crisis, please respond to the following questions.

- 5. What is your opinion of the treatment of healthcare workers in the wake of the recent COVID-19 pandemic?
- 6. How do you feel about the designation of certain healthcare workers as essential workers? (Probe)
- 7. In general, how would you describe healthcare organizations' responses to the healthcare crisis, and the treatment of their health workers? (Probe)
  - h. In your opinion, were the responses and treatment of health workers adequate?
  - i. If no, how should organizations have responded to the crisis?
- 8. Specifically, how would you describe your healthcare organization's response to the healthcare crisis, and the treatment of you and other health workers? (Probe)
  - j. What did your organization do well to respond to the crisis?
  - k. What should your organization have done differently to respond to the crisis?
  - l. To what extent is the organization's response indicative of their crisis preparedness and likely response to future crisis occurrences?
- 9. How would you describe the societal response to the healthcare crisis, and the treatment of their health workers? (Probe)
  - m. What did the society do well to respond to the crisis?
  - n. What should the society have done differently to respond to the crisis?
  - o. If no, how should society have responded to the crisis?
- 10. What impact (if any) has the recent COVID-19 pandemic and responses from healthcare organizations and the society, had on your commitment to a career choice in healthcare (nursing)?
  - p. Are you still willing to pursue a career in healthcare and nursing? (Probing question)
  - Are you considering switching professions? If so, why? (Probing question)
- 11. How has your employer's response to the COVID-19 crisis impacted your perception of your organization as a place to work?
  - q. Are considering a job at a different healthcare organization?
  - r. Has your organization's response influenced your perception of the entire profession in any way?

## **Appendix B**

Hello!

Hello! We are requesting your voluntary participation in the research study titled “Career Choice in Healthcare” This research study is about understanding career choice motivations and their subsequent impact on work outcomes (satisfaction, commitment, turnover intentions, etc.). The study involves one-on-one interviews with participants estimated to last no longer than an hour.

In this study, we will ask questions about your career choice decisions and explore any changes to your career choice in the wake of the coronavirus (COVID-19) pandemic and the experiences of healthcare workers during this period. Your responses will be kept completely anonymous. For your role in this study, you will be compensated with a branded gift card (\$25 for nurses or \$20 for nursing students) delivered electronically with your choice of either Amazon, Walmart, or Visa.

We hope this study will provide valuable information on the role career choice decisions play in work outcomes as well as the impact organizations’ crisis responses have on healthcare workers’ career decisions.

To sign up for this study, please click this survey link:

[http://utamsmr.qualtrics.com/jfe/form/SV\\_cw5vDHeMPEIWnMV](http://utamsmr.qualtrics.com/jfe/form/SV_cw5vDHeMPEIWnMV)

If you have any questions regarding the study, please contact me [ifeyimika.ogunyomi@uta.edu](mailto:ifeyimika.ogunyomi@uta.edu).

Thank you!

**Ifeyimika Ogunyomi**

**University of Texas at Arlington**



## Appendix C

My name is Ifeyimika Ogunyomi, and I am asking you to participate in a UT Arlington research study titled, “Career Choice in Healthcare” This research study is about understanding career choice motivations and their subsequent impact on work outcomes (satisfaction, commitment, turnover intentions, etc.). In this study, we will ask questions about your career choice decisions and explore changes to your career choice in the wake of the coronavirus (COVID-19) pandemic and the experiences of healthcare workers during this period. Your responses will be kept completely confidential. We estimate the interview will last for no more than 1 hour. For your role in this study, you will be compensated with a branded \$25 card delivered electronically with your choice of either Amazon, Walmart, or Visa. Only individuals who complete the entire interview will receive payment.

To participate in this research study, you need to be:

- At least 18 years old
- Able to speak and understand English.
- A licensed healthcare professional (ex. Registered Nurse (RN) with no more than three years (36 months) work experience, and currently employed at a healthcare organization.
- Be employed in a job that is classified as “essential” during the pandemic period (this implies that you are required to continue your job during the pandemic and are unable to work from home).

Your participation will provide valuable information on the role career choice decisions play in work outcomes as well as the impact organizations’ crisis responses have on healthcare workers’ career decisions. You might not want to participate if you are not able to commit to time requirement or do not have an interest in sharing your opinion on the research topic. The interview will be conducted at a time selected by you and will take place virtually -either over the phone or through an online meeting app (Zoom, Microsoft Teams, etc.). Requests for in-person interviews cannot be accommodated until university/IRB restrictions are lifted. The decision to participate is entirely up to you. There is no punishment or penalty for choosing not to participate. Your choice will also not impact benefits or services you would normally receive. If you choose to begin the study, you are also able to change your mind at any time during the study and quit participation without any consequences.

The research team is committed to protecting your rights and privacy as a research subject. We may publish or present results from this study, but your name will not be used. All information provided during this study including demographic data will be treated as confidential and will only be accessed by the research team. Interviews will be recorded and transcribed for analysis. All recording and transcripts will be saved using a pre-determined identifier (random five-digit number). While we do not guarantee absolute confidentiality, the research team will make every effort to protect the confidentiality of your records as described here and to the extent permitted by law. If you have questions about the study, you can contact me at [ifeyimika.ogunyomi@uta.edu](mailto:ifeyimika.ogunyomi@uta.edu). For questions about your rights or to report complaints, contact the UTA Research Office at 817-272-3723 or [regulatoryservices@uta.edu](mailto:regulatoryservices@uta.edu). **Please verbally indicate your voluntary agreement to participate in this recorded interview.**

## Appendix D – Measures included in Survey Questionnaire

### Consent

You are being invited to participate in a research study titled “Career Choice in Nursing”. The purpose of this research study is to understand career choice motivations among new nurses and subsequent work experiences and outcomes on the job and in your profession. We will ask about your motives for pursuing nursing as an occupation, your current experiences with the job and your organization, your current perceptions of the nursing profession, and your experiences and perceptions related to COVID-19. Participation in this study will require you to respond to a set of survey questions at two different time points (Time 1 & 2) spaced three weeks apart. The survey should take no more than 25 minutes to complete each time.

To participate in this research study, you need to be:

- At least 18 years old
- Able to speak and understand English
- A licensed nurse, currently employed in a hospital/clinical setting and working directly with patients.

Your participation is voluntary which means you can choose decline participation. You may choose not to participate if you do not meet the eligibility criteria listed above or if you do not have 25 minutes to complete the survey. The information you provide will inform researchers and practitioners within the nursing profession and the healthcare industry on the role career choice decisions and on-the-job experiences play in determining organizational and professional outcomes for the nursing field.

If you have questions about the study, you can contact me at [ifeyimika.ogunyomi@uta.edu](mailto:ifeyimika.ogunyomi@uta.edu). For questions about your rights or to report complaints, contact the UTA Research Office at 817-272-3723 or [regulatoryservices@uta.edu](mailto:regulatoryservices@uta.edu).

**Please read the consent statement below and indicate your agreement or disagreement below.**

### Screening Questions

1. Which of the following industries most closely matches the one in which you are employed?
2. What is your specific occupation within the healthcare industry?
3. How many years work experience do you have in nursing?

### Career choice motives

Citation: Jirwe, M., & Rudman, A. (2012). Why choose a career in nursing?. *Journal of Advanced Nursing*, 68(7), 1615-1623.

Instructions: The following are a list of motives nurses say influence their career choice. Please select the option that most reflects your decision to pursue nursing as an occupation.

Items:

1. Recommendations from family and friends
2. Not being able to get into any other study programme
3. Chance
4. Wanting to care for and help others
5. Wanting to develop a knowledge of healthcare
6. The possibility of a good job after not too long a training period
7. Availability of training close to home
8. The wide range of possible work tasks and areas

### Occupational self-efficacy

Citation: Pisanti, R., Lombardo, C., Lucidi, F., Lazzari, D., & Bertini, M. (2008). Development and validation of a brief occupational coping self-efficacy questionnaire for nurses. *Journal of Advanced Nursing*, 62(2), 238-247.

Instructions: The following statements describe occupational stressful situations which nurses may cope more or less easily. For each situation, please rate how well you feel you can easily cope with it...

1 = Not well at all      2      3      4      5 = Extremely well

Items:

1. Difficulties with patients
2. Relational difficulties with your supervisor
3. Insufficiently defined procedures
4. Relational difficulties with a patient's relatives
5. Difficulties in deciding how to do the work
6. Physical tiredness
7. Doing a lot of tasks at the same time
8. Relational difficulties with colleagues
9. Relational difficulties with other healthcare workers (physicians, etc.)

### Nursing Incivility (modified from Cortina et al., 2001 workplace incivility scale)

Citation: Cortina, L. M., Magley, V. J., Williams, J. H., & Langhout, R. D. (2001). Incivility in the workplace: Incidence and impact. *Journal of Occupational Health Psychology*, 6(1), 64-80.

Instructions: Please tell us about the type of interactions you have with the people you meet at work. The following statements describe behaviors that sometimes occur in the workplace. Please indicate your level of agreement with each of the following statements.

1 = strongly disagree      2      3      4      5 = strongly agree

Additional instructions provided for each referent source of incivility

- a. To what extent do you agree with the following statements about your co-workers? Other nurses in my unit....
- b. To what extent do you agree with the following statements about your superiors? My supervisor...
- c. To what extent do you agree with the following statements about your doctors/physicians in your unit and healthcare organization? Doctors/physicians...
- d. To what extent do you agree with the following statements about your patients and their family and other hospital visitors? Patients and visitors...

Items:

1. Put my down or are condescending to me
2. Pay little attention to my statement or show little interest in my opinion
3. Make demeaning or derogatory remarks about me
4. Address me in unprofessional terms, either publicly or privately
5. Ignore or exclude me from professional camaraderie
6. Doubt my judgment on a matter over which I have responsibility
7. Make unwanted attempts to draw me into a discussion of personal matters

#### Work-Family Conflict Scale

Citation: Carlson, D. S., Kacmar, K. M., & Williams, L. J. (2000). Construction and initial validation of a multidimensional measure of work–family conflict. *Journal of Vocational behavior*, 56(2), 249-276. <https://doi.org/10.1006/jvbe.1999.1713>

1 = strongly disagree    2    3    4    5 = strongly agree

Time-based conflict dimension

1. My work keeps me from my family activities more than I would like.
2. The time I must devote to my job keeps me from participating equally in household responsibilities and activities.
3. I have to miss family activities due to the amount of time I must spend on work responsibilities.

Strain-based conflict dimension

1. When I get home from work, I am often too frazzled to participate in family activities/responsibilities.
2. I am often so emotionally drained when I get home from work that it prevents me from contributing to my family.
3. Due to all the pressures at work, sometimes when I come home, I am too stressed to do the things I enjoy

#### Job Stress (Workload)

Citation: Spector, P. E., & Jex, S. M. (1998). Development of four self-report measures of job stressors and strain: interpersonal conflict at work scale, organizational constraints scale, quantitative workload inventory, and physical symptoms inventory. *Journal of Occupational Health Psychology*, 3(4), 356–367.

Instructions: How often do you experience the following in your job?

1 = Never 2 = Once a week 3 = 2-3 times a week 4 = 4-6 times a week 5 = Daily

1. Unpredictable staffing and scheduling
2. Too many nonnursing tasks required, such as clerical work
3. Not enough time to provide emotional support to a patient
4. Not enough time to complete all of my nursing tasks
5. Not enough staff to adequately cover the unit

### Job Satisfaction

Citation: Thompson, E. R., & Phua, F. T. (2012). A brief index of affective job satisfaction. *Group & Organization Management*, 37(3), 275-307.

Instructions: Please indicate the extent to which you agree with the following statements about your job.

1 = strongly disagree 2 3 4 5 = strongly agree

Items:

1. I find real enjoyment in my job
2. I like my job better than the average person
3. Most days I am enthusiastic about my job
4. I feel fairly well satisfied with my job

### Professional commitment

Citation: Lachman, R., & Aranya, N. (1986). Evaluation of alternative models of commitments and job attitudes of professionals. *Journal of Organizational Behavior*, 7(3), 227-243.

Instructions: Please indicate the extent to which you agree with the following statements about nursing.

1 = strongly disagree 2 3 4 5 = strongly agree

Items:

1. I feel very loyal to the nursing profession
2. For me, nursing is the best of all professions.
3. I am proud to tell others that I am part of this profession.
4. I really care about the fate of the nursing profession

### Turnover intentions

Citation: Landau, J., & Hammer, T. H. (1986). Clerical employees' perceptions of intraorganizational career opportunities. *Academy of Management Journal*, 29(2), 385-404.

Instructions: Please state the extent to which you agree with the following statements about your intentions concerning your current organization.

1 = strongly disagree    2    3    4    5 = strongly agree

Items:

1. I am actively looking for a job outside my organization
2. As soon as I can find a better job, I'll leave
3. I am seriously thinking about quitting my job

### Professional turnover

Citation: Van der Heijden, B. I., Van Dam, K., Hasselhorn, H. M., & NEXT-Study Group. (2007, May). *Occupational turnover: Understanding nurses' intent to leave the nursing profession*. [Conference session] 22nd Annual Conference of the Society for Industrial and Organizational Psychology, New York, NY.

Instructions: For the following statements, please indicate the amount of times you have considered each activity.

1 = Never    2 = Once a week    3 = 2-3 times a week    4 = 4-6 times a week    5 = Daily

Items:

1. How often during the course of the past year have you thought of giving up nursing completely?
2. How often during the course of the past year have you thought of taking a further qualification outside nursing?
3. How often during the course of the past year have you thought of giving up nursing completely to start a different kind of job?

### COVID-19 related questions

1. To what extent are your answers to the questions asked in this survey and your perception of your career influenced by the recent events of COVID-19 (1 = To little or no extent to 5 = To a great extent)
2. The following questions are related to the recent COVID-19 pandemic and your perception of the pandemic. Please indicate how much you agree with the following statement.
  - a. My nursing education prepared me with the knowledge to keep myself safe as I care for patients with COVID-19 and other infectious illnesses.

- b. My facility has supplied my healthcare team with equipment we need to safely care for COVID patients.
  - c. I have the understanding needed to care for the immediate needs of my patients who may be experiencing a COVID-related health crisis.
  - d. I am able to care for the immediate needs of my patients who may be experiencing a COVID-related health crisis.
  - e. My organization is prepared to deal with future crisis like COVID-19
3. Has the impact of your work on your family/personal life during COVID-19, influenced your career decisions in any way?  
1 = Yes 2 = No
4. What is the most significant impact COVID-19 has had on your career choice decisions?  
**Options:**  
It has reinforced my choice of nursing as a career  
I am looking to change my work unit/department (ex. change from ICU to maternity ward)  
I am looking to change my work setting (ex. change from hospital setting to family doctor's office)  
I am looking to move to a different healthcare organization  
I am looking into a different career outside of nursing

COVID-19 Organizational Response

How would you rate your organization’s response to COVID-19?

(1 = Not effective at all to 5 = Extremely effective)

Organizational Efficacy (modified to be COVID-19 specific)

Citation: Bohn, J. G. (2010). Development and exploratory validation of an organizational efficacy scale. *Human Resource Development Quarterly*, 21(3), 227-251.

Based on your organization's response to COVID-19, please state the extent to which you agree with the following statements.

1 = strongly disagree    2        3        4        5 = strongly agree

- 1. During an economic downturn, this organization will come out strong
- 2. This organization is likely to fail, I would never recommend that a friend work here
- 3. I would be surprised if this organization exists in the future

Demographics

- 1. How old are you?
- 2. What is your gender identity?

3. Are you Hispanic or Latino?
4. What is your race?
5. Please indicate your military service status
6. What is the highest level of school you have completed or the highest degree you have received?
7. Are you married?
8. Is your spouse employed?
9. Do you have any children?
10. How many children do you have? (Skip logic from Question 9)
11. Please indicate your entire household income before taxes.
12. Which statement best describes your current employment status?
13. How many years of nursing work experience do you have?
14. How long have you worked for your current employer?
15. What shift do you typically work?
16. How many times/days do you work in a typical week?
17. How many hours do you work in a week?
18. Please indicate your work setting
19. What is your position or job title?